

<400> 8288

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agggctaaaa atgcatttca agccccagct gaaaaccaac tggagagggt gaggcaaaga 120
gagaaaagga gagaacacaa acttgttgct gggagtagag gctgccacct gctccctatg 180
gacatttgca aatgctgggtg aatgactgga ccctccagga atagtgcctt gaccttagcc 240
ccaaaatgta tccaagtgga gaacatgcag agcccactgt cccaggagaa ctccccctcc 300
caaagggtga cagaacacga agtagactgt atatgaaggc aatggacagg gcagatggag 360
tgtagcatc actctcttta ggcacttggt taaggaatgt aggctctcca gtgagctgcc 420
tncnccaga gccctccatt ctggtcttca actgggcttg tgcctatagg gcaccccatg 480
ctgtaaccng canggaaaaa gtaaaggggg agnttcttaa caancctgag gcttnttcaa 540
aangaaggtt gg 552
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<210> 8289

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8289

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gaaaaatggt ctgaaatttt tcaagtcaat gttgttttca agtatattaa aatgctcaga 180
agaaaaaatt ctccatggtt ataattctga tcaatctata aatgtacttt ttaaaagaga 240
gttccaacag aggtggataa taggtaagtt cctcagacac aggcatacag tctttttgaa 300
gaaatagaat gccttggttac cacaacctgg ttgatttttt ttttttaaac actgatttca 360
ggcacaatgg ctgaatccac ttctgggtca tctttctcct cctcttggtt ggtttacaag 420
agtagtgaat acttcagtta tggacagaaa gaaagacaca aactctgaaa cggagacttc 480
acttttcact acaaaggaat caaagtcact gagttctcat tggttgggggt ggaatctgct 540
gnccctgtgc caaaaatag 559
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<210> 8290

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8290

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gcaatttatg cattttattg tatatatattt ataactcaat gaaaatgtta tatcatatat   60
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acacacacac atacaccctt atatatgatt atggcagcct tctacttctc caacgcattc  180
ttttttttgt ttttttgaga cagagtctct gtgtgttgcc caggcttcaa tgcaatggca  240
tgatctcagc tcaactgcaac ttttgccctc tgggttcaag tgattctccc gcctcagccc  300
cccaagtagc tgggagattg aggccgcggt gagctgattg tgccactgca ctccagcctg  360
ggatagagcg agaccttgtc tctaataaat acacaagcaa aatccaaagt tcgctttgga  420
ttgctagccc atcaaaaagg ctagctcctt gaagggtggga atttttgcca ctttagttcc  480
ctgctgcatg cccagcaact ggaacaagtg ctttgcacat agtangtgct cagtaaatgt  540
gaaggatgaa tgaanac                                     557

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<210> 8291

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8291

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gcaaagaagg aatgaaggga tttattgaaa atgaaagtac actccacagt gtgggggtga   60
gcctgagcat aggagcacia aagccctgtt acagaacttc tgagagttaa aataccctct  120
aggtgattcc attggttact tggggcacac gttatgtaga tggagagcct gttacagaac  180
ttctgagagt ttaaacaccc tctaggtgat tccattgggt acttggggca cacgttatgc  240
agatggagag gatgaagtta caaagtcatt tgcttggcct atgtcctatg gagaaggtat  300

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ttcctatcat aactgaagtg tgaatcagcc tatgttccct gcactcagac cctattttcc 360  
 tgcctcctac ctacagctgt gtggtcctga gctgtcacct cttccctttg aagctcaggt 420  
 tcctcatcgg taaaatgagg cagaaatact cactgctgan atgtgtgagg atcgcacaaa 480  
 ctcagtgtct caacatgttg tacntgtgtt tgggccctct gagcccttga ggcttgcccc 540  
 aggtggaac 549

<210> 8292

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8292

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 cgcatttact atcatctcat ttgaaagctg atgtgtttgg gctgggtgat ggcagagggg 120  
 tgggagttgg gggatgctgg ctctgaaatg ccagagaggc attaagaact ctggaagcat 180  
 ctggctactg gtagacattt tacacagata gcaatttctg accaatccat ttcaatgatt 240  
 tctaaccat actcaactat ccagaggata ctgttttaag aacattattg taaactgata 300  
 ctctctattc atttacaaaa ttcatcatt gcatactttt tgtttaatag cttggattca 360  
 gtgttacaga tttgattgac ccaagtga aaatactgac actaatcatt ttttaagtgt 420  
 atttcagaag aatatgcgca atgtttctaa gttattgtga ctttgtgact gtcgtagctt 480  
 taaattataa tactaatatc ctactctgag aaatgtgtaa gacacaggtc taacaaacaa 540  
 ctacattaac ctcg 554

<210> 8293

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8293

gncttccata tgacactttc attccccata cttttctgtg aagaaagacg cagaggtagc 60  
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 atgggagatg aaataaaatg agcaagttct gaggggtgat ggacagatca aaaacagatg 180  
 atcttcaaga caacataatc acccataaac gtggtaaaac aaaaaattac acttccaatt 240  
 tggtggaaag agtgccacct gctgacactt tctggaataa ggtagtttag cccatttgaa 300  
 agaagctgta ttgccttctc aaaaacaacg aaaacctact attgatcaat gaaggtaaca 360  
 agatataact tcaacaaagt aaaacaacga acacataatt atcccacaaa ataagaattt 420  
 aaataaagaa ttatcaaacc tggaattcta ctctgtcaa ttattgnttc tggcatatgg 480  
 taggggttca aaatacattt gttggagcga attctaacat agtactattt agttttctga 540  
 aaatcctgna atgn 554

<210> 8294

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8294

cttttgcaat ttcttctagt ccttcaccac tctccatgcc ttctacaaaa atccccccac 60  
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 atgagtgaga cgcatacaag agcttccttc tgtactgact ctgttgttta ctacgttttt 180  
 caatctgttt ttccagctct tcaacacttg ctgcttggtc accttcaccc tcactctcac 240  
 agatatcagt cttttttcct tttttgtctt ctttatcttc ttcatcctca tcactctcat 300  
 ccccttggtc atcaactgtc tcgtcatcat catcgtcata atcaactgtc cctcccttcc 360  
 ttcttcgctt gcgtcctgga gtgggtgtgc ccaagggatg ttgctcttct cccagatcaa 420  
 tgccacctga agtgtctctt ttgcctgttt tcttagcatg aatgattctg agcttgcgga 480  
 gtttaccttc taccacccat ttatctctcc tcaagttgac atataatcaa ngtettgncg 540  
 attcactgac cn 552

<210> 8295

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8295

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ggtattcctt ttattataat gttttaaact tggettaaag ttcaaaatac tatttccaga   60
taactttcca ctgttacatc aactaggcaa ctttgttatg tttatgttat atgtatcagt  120
tacttatcag cacagaattt taaccactct gctaaatttt gagaaaacag ctaaactcaa  180
tataaaattt ggcctacaga attatagtgg ctatttggtta ctaaaaatat tccaaaagaa  240
atttacttat ttactatat tccatattct ttaacttaaa atctgctgcc actgtttagt  300
aaaagtggga caaataaaat tctttaaaat atagaaaata cagttcctgt taagattttg  360
caaacaaaaa attaataaat aatacaattt gagtactcta aaacaatata ctttgtagtc  420
tagattgtgg ttttggtcag tatgtctgac actatgaaga ttacatcag ttcagggaat  480
gagttctaatt ctattaataa atagtcaata taaccaaaca cctgacagga ttccccatat  540
gaatattttt a                                     551

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<210> 8296

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8296

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gtttccagaa gagaaattta atctaattta catacttcta ggtacatcga taacaaaaat   60
gtggccactg aaaaaagtta aaaggtcaat cagctcctgg cttctagctg gccaggatt  120
gcaaaaataaa aagatccacg ttccttattc tctacacaaa acgcgttttt aaaaaagtga  180
aaggtctagg gagctataca tagaaagcaa cagtgaagaa ggagagggag caggagtggg  240
ggaggagagt cccaccccc aacccacccc tccagggcc cagagcccct gaggtctctt  300
ggggggcctt gacatggcag gaggcagctg tcagctctga gctcttccca gctgggaagg  360
cccctctcgg gggcagccaa caaggatttc cgtggcattg tgggctcagt ggggggctcc  420

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caggccccag caggccccac agagggagcg tggcttcct gagcaagcac cgtggcatga 480  
tgtggtcgtt caaccagga actgggggtg cngggcaagt cccgggtctt acgaggtgcc 540  
tgtttgtgtg tggt 554

<210> 8297

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8297

cacagaaccg gagtatttta ttgcaccaag atcttggcaa cacgtggggc tccccaggcc 60  
cccgaaagg aggtgcagag gatgggacac agacctctgc acacacacag gtgcggccat 120  
gcaaccagga cgcggggcag gcaagtgaga ggacctggga gaggtagctg ctgtacacag 180  
gccccactcc ctccagctcc attcccaagc acaaaattca acagaccag atcctaagtc 240  
aaccaagtga ctgctatgac aaaggcttgg gttattgaca ttacttaca tacgtgtaca 300  
agacctagag tttgaactcg ttttctgggc ctcatcttcc ccttcctat ctggttgatg 360  
acttcggtgg agggaaggga cgtgactcca cccaacagtg ataaacgctg cagaaagtca 420  
tctcgtgctc accactgccc aagaattaac gaatgtatgt accccaggaa aagggtttac 480  
agttatctag tggagaaggg aanaaactga tttggaggaa aagaaggag agaaaggacc 540  
cagataaatt tnn 553

<210> 8298

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8298

aataattact ctttatttaa aataaataag ccctcttact tacagggaaa atatgaaagc 60  
aaactctgtc ctcttggtct aagacagaaa ccacattcag aatatgttca ttgaaaaagg 120

aaagatttgt tgattatcaa acaaactctag gtacttcaat acacattggt tctttgaaaa 180  
 ataaagactg aaaggaataa ttcatttcaa aaagtcacag gttagaaaac caattttcct 240  
 tctgaggctc attttagcaa atcctccaag tgttcccaaa tcttttaaaa aagctacatc 300  
 ccctgagaaa gggccctttc cctgtagccc tcttgctctg acaccagcag ccctgcaccc 360  
 ttctgccaag tggctccctg caggacggtg ctgttgccgg gcaggaatgg ccctccatgg 420  
 caacctccag caggcaggag ctcaccacct gctttctgca aactcactca cttggctcag 480  
 ctattctgca atgganagga agttccttac agccaaagta ttctaagntc acattttinca 540  
 gtt 543

<210> 8299

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8299

aacttgtctg tattttctgt tattctacca caaatttctt tcaactcttt ttataaaaaat 60  
 gcctgtctcc ttagttgacc tctaagtttc taggttcttt ctttttcttc ttttcttttt 120  
 cttttttctt tttttgagac agagttttgc tcttgttgcc caggctgaag tgcaatggcg 180  
 caacatagge tcaccacaac ctccacctcc tgggtttatg tgattctcct gcctcagcct 240  
 cccaagtagc tgggattaca ggcatctgcc atcatgcctg tctaattttt tgtattttta 300  
 gtaaagatag ggtttctccg tgttggtcag gctgggtctca aactcccgac ctcaggtgat 360  
 ccgcctgcct cgacctccca aagtgctggg attacaggcc tgagccactg ctcattggcca 420  
 gttctttcat tttttgagtt tctgtttctg atctaaagtt taccactggt ttccaatttg 480  
 tttgtgaagc anagaatatt ggcacactta gttgcttgca taaacattcc tttcctataa 540  
 gatatagn 548

<210> 8300

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8300

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aatagggat gacatttctc catgtttgtc aggccttgga ctctctacgt caggtgatcc 60
atccaccac ctcggcctcc caaagtgtg ggattacagg tgtgagccac tgcgcctgac 120
ccttgaggt acttcttaaa gctatgggg tttcccagag cttggtagca tgtgtgttca 180
aagggtatc aatgttgagt tgtcctagca ggcactggat agagagcagg atggtcctga 240
tatcatagg ggcagaccac ttctccttca ggatgtccag gcatatgtta ccctgggtgt 300
ccacgttagg gtggtagcag ggtgtgagga acttcactgt gggtgcatcg taaaggtggg 360
tagtcattga ggaactccag caagagctta tacctcagat cttcatacac tgtgccagct 420
gcttcatgga tgggtgtccat ttgataaggc tttcagggtta ggcagaaatt cttttgtcac 480
caggcatcat gaggggtcat caacttctgc tgtacctttt ggctacaggg ncccaagcaa 540
tgnccctgnt gg 552

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<210> 8301

<211> 499

<212> DNA

<213> Homo sapiens

<400> 8301

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actgtttgtt ttttnccaac agagttnccg tcttgttgcc caggctggag tgnannggca 60
tgatcttggc tcaactgcaat ctctgcctcc caggttcaag cgattctcct gcctnagcct 120
cctgagcagc tgggattaca ggcatgtgcc accacaccgc gctaatttta tattttagt 180
aaagacaggg tttctccatg ttggtcaggc tggncctgaa ttcccacct caggtgatct 240
gcccgccttg gctcccgaag gtgctgggat tacaggcatg agccaccgng cccggnctac 300
tagtgtttta tctttgattc tctgtcagcc ctcacccctg gttcttgctt ttcttgatca 360
acaccttttc ttgcctntgt ccccttctct cctgtatct ctcactcccc tccaacctgn 420
gggacagtgg tgtggangag gaaccatagg cctganagtc catctgactc cttnctggac 480
ccanaagcan gagaaggng 499

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<210> 8302

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8302

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aaatgttcag tcttttattt aaaaactata aacagtcacc aaagtaaata aagccattct   60
ataacataaa ctgttaggtc tatatttttt actgcacatc ctaaggacac agcagaaatg  120
gtggttggga ggccttccac atttttggat gctaatagaa caggcaatag gcagttataa  180
atggatacat ttcacgctgg gggaaaaaag acaatttaag gaagtgagca gtttctgagc  240
aggaatgtgg tacagtatta agaatggaag aataatacaa taaaattcca cactatatta  300
agatagaaaa agtagtgaag aaaatatcat acctgcacat aatgcatata taacacagga  360
gaaaacctgt ataaaattcc atgtatttaa accaatttac aaatacaaaa aattctgtcc  420
aagctctgag cttgtacacg acaaacgttt acagtggata catgttaagg aaaaccaaaa  480
aataccttca aatagttttt cttcttaaaa aatgacctga gatataattat tccataactct  540
ttagccngc aaaatgaggt                                     560

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<210> 8303

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8303

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ggcataacac aatcaggctt tttttttttt ctttttcctt ttaaataataa ggcaacttgc   60
caacacataa cttaaaactg gtcttcagtc acattgcttc agatcactag agaatttctg  120
gctaacgaac agtagtggat agtgaacaaa atgcaaaacc ttaaataaga accatcagct  180
gacattcccc agagacaaga ggaaaggtaa gggcttattt catctgtaaa aaataaaaaa  240
gcccaattct gcatctttta cagaatggtg caaaaatttg taacaaaaca gtctaagttt  300

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aaaattacag aaaagtgttt ctagccaact aattgtcgct tgggatgaga cgtgctgagc 360  
 atggagtgga tgaaggtatg ctctaagaat ggacagaggg caggaggggc ttgtttccaa 420  
 tgtaggcccc gcttcaggtg ttagaaccat gctcatttgg taaangaagt ctcaaagagc 480  
 ttaangcttt gggttgggtt ttttttcctt cattaaactg aggggctgca ctaanggtga 540  
 atctacctgn ggg 553

<210> 8304

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8304

atttccatga attcaaagcc ttttaatgat gtgaacactt actccccatt tcttttttac 60  
 attgttacia aaaatttaca tacagttttc tgaaagtggc attttgttgg ttgttattat 120  
 actgatgaca catattaaca ctttgtattg aagaagtatc ataaaaatca cagggcatta 180  
 cagatttttg ataagaagta gtaatagcat tgtcttttaa cagctggagg ctcccaggca 240  
 tactctttgg tgagaaatga ttaattttat attttcattt tgatgagaat cttttcttgt 300  
 ttttaccagt tataaaaaca aagctttttc tttgttgtga tactgtgcac taagacttag 360  
 tttcttgagc tgatgctaaa taaaatgaga tcaataggaa tattccagga ggtcgtgaga 420  
 agtttttaga aaggatggca tctacatata tatggagctc tgaaaactgt tggagagtat 480  
 gacctgggac tgaaactgtg gagcacatag ccagggtcaca ngcttcgana gcnnaaagag 540  
 ttgctctg 548

<210> 8305

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8305



agtataataa ctttttattt gacatctaca agattttggc atcttgcagc tttttaccag 60  
 gtttatacaa tctcgatttt tcaatagtgc aacctgtgga agcaaaaaaa aaaaaaaga 120  
 aaaaaaagaa aaaaagaaaa gaaagaaaaa gaaagaaaag ataaaaagac caactgtccc 180  
 ctcaacttggt tttataaaca tctattatag gcgaaacaaa acttaccat attatataga 240  
 taagtgtcta ttcacatttg tacattacca tttttaacag cttgagataa actctacgtc 300  
 ttacaacaca ttaaacaata ttcaagttac tgagtaacaa caataacaac aataacaaaa 360  
 gaacacacag cagaagcctc aagtgtttcc tcattgtcta caactcaggt atggtttcct 420  
 ttttatgagt gacaaagcaa attaagataa tgaagtaaaa aacgattggt tgcaagatga 480  
 aagccaattt gnacttcctt ctaaaactac ctttaagttg caaatgtaaa ttttaagaagc 540  
 tnatagccnt 550

<210> 8306

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8306

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 caccgacgtc cccctgcctg ctccgcaacc ccagggcctg cagaaaaggc ccacgagact 180  
 cagactggca gagacttagg cggaccagga acaggggcgc agtctccgtc ccacccaaac 240  
 cctaaccaga gagaacacgg cacgttgtgc cagacggagg acggatgccg gcgagggtcc 300  
 atgtcctcac tgccgacaag gctgggagct gggccaagtg aagcagaggc ctncacgtca 360  
 gatgtgagcg ccaccggccc aggtgactgc agttcttccc tccttccgtt cggcttgagc 420  
 ccttcagagg atcggaaggg ctgaagcctg acctggtgcc gttgtcctgg gtgggtctgt 480  
 cctgctggtc ggttctgncc ttttcgggag gttggctggc acttgcangt ggaaagcttc 540  
 tnggttacct nagggaaaag ngg 563

<210> 8307

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8307

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ggagagagat gtatttatac cagtggggct aaggaggaag cagtccagtg ggggactttg   60
agtgctgtgc agtgttctct taagagtcgt agtacagtcc tggggtcaag tctctttccc  120
taatctttgc tggggaagcc ttgagccttg atttatcctt cccttggcctt tgggctttga  180
ggaagttggg gatggagggg atgatgcttc tttaggtttc tctattccaa gcccctctga  240
atttctagtt gcaacctgcc ttcacacaga gttgatggga aagattagtt gtagatgtcg  300
gtatgggatt gagcctacag caagaggaag aagggaactc cagtatagag tacacaaagg  360
aaaagggcag gaaagatacc aaaggcttat gaaaacaaag gaagggaaga aaagagaaaa  420
aaggtggaaa atcaggtccc agattgcttg ttaggaagaa tgaggtaatt ttgggcctag  480
gaatgcacaa tccaaagctt gattttcacc acctncattg gtctcttcga gccttccttc  540
caaangttct tcccggctta aagccagcan                                     570

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<210> 8308

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8308

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cttgtcccat gggcacataa tttagaatc atgctctcaa atgacaaaac atcaaagggtg   60
agaggaggga ccaacaatga acatgatctt ttttaaaagg gggtaacaga aatagtaatc  120
ttttataatt ataaatcctc tgcataccat aaaatgattt ggtttagctt tcaaacaatca  180
tctaaacaaa caaacaagac agagagggaa gttcactgct ggggtttgca aagaagggca  240
tctgttcgtg ggcagatgct gcagggtggc tgctgaaaag ctccttttat gtgcatgatg  300
gtggtcttct cggctacagt acaagtgctt gtgcatcaag tataaaatac aagcctttta  360
tcacatagat cagcttttta gcttttgtaa atttaaaaac aaaaaggata aataaggcac  420

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tgtactttta aaaacgaaaa ctgcttggtt ccaagtttaa aaccaagga caccagaata 480  
 taatatataa cttccttacc tcagagaagg actctgcaag gttccttttc atctgagaag 540  
 catttctggc atctaa 556

<210> 8309

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8309

ctgtggatat tttaaaagtt tatttctatt ttaactagcc cacagacccc attctttgag 60  
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 tctgcacctt ccatcatgat gcacatttta agttaaaatt gccaatataa cccttaaaat 180  
 gcaagtttat tgaataaagc tgagaagagc agtaaacaga caaaaaatgc atccacctaa 240  
 ataaaaaaat tcacatatatt acatagtcca gtaactgtta aaagttttca catgcagagg 300  
 ttaatgcaca ggaaaatggt ggtaatagcg tctggatgtc ttgaaatgcg gaaagcaatg 360  
 tatagacaca caaacacatt aaggtttagc tatagggtcaa ttaacaaacc tatgcagtcc 420  
 ccacagagtc acacattcta gttccaattc ctccttttag gcacaagcaa gttggccaca 480  
 ttcttttigna atgggtcaca ctggccatta anggggttga acaccgtnc aggttnaaaa 540  
 tnccttcatt tccgaanc 558

<210> 8310

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8310

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 taccagctag tgttctggta tctcctctga atttttaatt aatttcactt ccagagaatt 120

aagtattatt tttgttgaca gtttgttctc tcaaacggca ttgcatttag taatactttt 180  
 ttagttgttg gggtttttgt tttttcaa at gttactaatt tgtttccctt tccagctgaa 240  
 gaaatagtga ccaggggagt aaatattctc aggccactgt gtttgtatat tatggacaat 300  
 caagaaagaa ctaggggatg ttagagacag aactccagag gtcaggtcat ctccgtctac 360  
 tcacttggtg gacttggcta agtcacgtga tctctctggg cctccatttc ttcactctata 420  
 aaatgggact aatactttca acctagtaca tgaaaagaaa atatgctgat tggacccatc 480  
 ctacttctgg tagnaacctta caccagagcc caggctgggt ggtcatggat ggtncctgc 540

<210> 8311

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8311

agggctgaga aaatattcag tttattaa at attgtgaatg ggtggaatat cagatacatc 60  
 atctcaatat gtaaatatcc tatcccatct caacatcaaa ttagattac ctggatttct 120  
 tctttgcttt tctctatgat tacagcagag atcattatgt attttattag tttcttcagt 180  
 ctttaaggta tttttggatg atgttcaa at aaactccaag ttatctccaa ctttttctga 240  
 acaaaatatt tccattctta agatacaggc ttgtaattca catacttgat gctactcaat 300  
 ggcgctttat ctgtattttc ttctcacatt tgactccaga gtattcagtg cggcaggaac 360  
 acacattggg gaaatatgca tctgcctcca taaagacatt ttgggttgca aattggtatt 420  
 gacaccggac tccttnccag gaggaaggac aatggcatat gctgggccca atgcattcac 480  
 caccgtttta catttctgca agcnnaaang ngtgttgcat cgttcccact ccacca 536

<210> 8312

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8312

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ctcgagacag ggtctctgtc acccaagctg gagtgcagtg acacaatcaa ggctcactgt 60
agcctcaatc ttcagggtc cagggatcct cccatctcag tctccttggg agctgggagt 120
aggcatgtgc caccatgcct ggctaatttt ttaatttttt ttagagatg gggctcttgc 180
atgttgccca tgtcgggtc aaactcctgg gctcaagcga tactcccacc ttggcttccc 240
agtattggga ttacaggtgt gagccacat gtctggcttg cttctctttt tgtattctaa 300
aattcaaagg cctaagtatc aaatccctaa atctccaaat actgtcacag ataaagactc 360
aataataaac tccctccgaa agtttagaca ggctcagggt agagacttgt tcaaggggtt 420
ataaaaagaa acaccagtgc tctgcagaag aatcaagttt ttaatttttt taaatgnatc 480
tattttaatg ggaataagtt gatcattaga atttgtaaac caaaanggta atttctcaag 540
ttt 543
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<210> 8313

<211> 462

<212> DNA

<213> Homo sapiens

<400> 8313

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ctggaaacta aagattttta tttaatccaa atgttgcact ggaagaagaa atcaacagtg 60
gtatatttac ttaacaagga tgtgtgtaat acaagacaac cctggggatt acacacttga 120
aggaatggaa gtggcaaagg ttaacaggca gaaagcagct ggatgaaaca gtttattttc 180
atcttagaag attctagcta tctgtggaga ccaccactgt tccccgaaa gctaaagttg 240
ttaagtttgt aggagtacca caggctcttc cccctgctgc aagacagaga cttgctctgt 300
tgcccaggct gcagtgcagt ggtgcaatct cagctcactg caacctctgc ctcccgggtt 360
caagcaattc tcctgcctca gcctcccatg tagctgggat acaaggtgtg tgccaccatg 420
cctnggttaa ttttnggant tttagtanan attgngntt ta 462
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<210> 8314

<211> 491

<212> DNA

<213> Homo sapiens

<400> 8314

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ctttgtccaa tgattaatat ttgatatct attgacaatc ccttagaact ttaaattctca 60
aaaacaaaaa agtactgtgg atctccatag ttatacaga attatgtgaa ttctataaac 120
ttttctgaac aaaacaatta catgtcaaga atccatgaag cctggaagat acgtcacgt 180
ttttgaggtt tgtattaatg ccagttttta ttgtattaga caaatgctct ctgagaatcg 240
aagacttcta aaggtagaca ggcccagttt cccattagag ttctggaagc agagcctggg 300
gaaggtctgt cacttgccca tcactggacc agccagaagc cagcgggggc caggcggggt 360
ctgcaggctg caggtcctt ccagtcctgt cctgctgcc ctttggggac catthttggt 420
aanaaccttn gccggttgnc cttgaancct cnagcncct taccttaggc ctaaanggtt 480
cctgaaaccc c 491

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<210> 8315

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8315

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ggagtaggca tgggtcaatg attgtttatt gaataaatth actactggag taagaagtgg 60
cttagagtcc agtgtaacat ggtggctggg agtgtgagt gatgaatggg gggcccgata 120
taggaactgg gccctcgggg atgaggccga gttccatcct gccttcttcc acgaccatcc 180
ttaccttccc acccccaccg ctcccattct gcagatgaga aaaccgaggc tccgaaagga 240
aaaaccactg cctggattcc cacgcctctt ctttaactca tttgcagggt agggcaggga 300
aggaaaatcc tagggtcagc attggggagg gggggactct cctaaattta ttgggcaaca 360
ggctgcaggt ganggggctg acaggaagaa gggtcgggg tgtnaataac cttaaaaacc 420
gtaggtgaca acnggaagtt ctttaagaan accnttgccn aagggaagg ttttgggggg 480
ttttccaagg gttttgcca aaggncccc gccaaacctt gggccagaaa atgggggttt 540

```

tannccttan gggnt

555

<210> 8316

<211> 467

<212> DNA

<213> Homo sapiens

<400> 8316

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aaagatagag ttttgctttt gttgctcang ctggagtgca gtggcacaat cttggctcac   60
tgcaacctct gcctcccagg ttcaagtgat tctcctgcct cancctcctg agtacctggg  120
attataggca tgcgccacct tgtccggcta attttgtatt tttagtatag acgggggactc  180
aaactcccga cctcaactca tccgcccgcc tnggcctncc aaagtgtgg gattacaggc  240
gggagccacc gcgccgggcc atcttagatc ttagagccca ctttagtcct tgaaatacat  300
ctgagaagcc aatggcagcg aatgacggtg cccgcctgcc ccaggcacct tgggtgggcc  360
aggccctgct tcaggagggtg gcggccactt cngggatnac tgatgcagcc ccnaccceca  420
tggtttgtcg ggactaanct gngtcttnaa ggtntgtgaa acttcca                    467
    
```

<210> 8317

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8317

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caggtaaaac cacattgcct ttatttggct aaagaacaaa atccaaaata actcagaaca   60
aactaagaac agacaggaaa attacagact gaacccccact tgaggaagac ttccccacgg  120
actcacactg gtgatggggc gaacgttcaa gacgaagcca gcagtccttt ccaagactct  180
tttgtctttt agggatcctc aatacaaaac aaccctaacta atccaggata tgtgttcaaa  240
acagtcagtt ttccccctca aaaggcggga aggcccactt caaacctcca ggaacacaac  300
ccaagtcatc ccagtgttaa acctgggtgct tccgttttct gcctcaatcc gagcgctaac  360
    
```

ataaaatctt ggcagacaac aatctttctt tttcaagaaa attaacattt aatgggataa 420  
tcccaagaac atggtctact taatttgctt tggaaaattn aaacttnggg nccctntttn 480  
ttcccaaggg cngtnttttt ttttgagaa 509

<210> 8318

<211> 518

<212> DNA

<213> Homo sapiens

<400> 8318

aactttacaa aatttgtttt atatctgtta gaaaatgtac agacataagt attttcagtt 60  
gacaaagcat caaaccaggt tctgcctagt gataagtttc accctagagt atgtatgtaa 120  
cgtttttagct tatccatcct ttcttgagac gcctccattt ccattgaaag ccaggctgga 180  
gcaggaccct tttggagtag tgactcagtt gcttccaaag cccctgctat tgtatgcagc 240  
gctgacctgt actcttcttc ccaggggaac tcttgacgag ctctttttgc ataaggctgt 300  
aaagatgacc tctttgcttc ttctacagtc acattagcaa agggttccca gaaaatacct 360  
ttttcctggt tcacacgttc cactttggca agcttcagtt tcactacaa acccagcttt 420  
ntccagaang ggtccacttt ggtccttaag tttttttana acttgggaca cnttgggaac 480  
cttttcttta agaanttggg ccntaaggg aatctggn 518

<210> 8319

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8319

aaatttaaaa agatgtcctc actgcacaag tgactacggg ctacaggcaa ggatgggaga 60  
cggaggcttc aacacaactc attgcactta gaaccgttac taaccgaaac accatttgct 120  
tgtcaacaat gtacccttga cagcaggag aaacttcttt atagtctctg cttcagacaa 180



gatttacagc tttctccaag gccagaggcc aattgtgacc acaagtcttg tttcttgtcc 240  
 accagaccca atcctctggc accttgtagc ccccgttcct cagcaatatg ctcggcctag 300  
 gttccagagg cagctggaag gaagcagcta tgggctcatt cagttctgtt tgcccaaadc 360  
 cagaagccct aggaaagtcc cgtctgagtc ttgactcctg gacccttcaa tggcttgaag 420  
 tccggtactt gggcacaacc ccaatttcac cgggggtgggg aangctttga aattggaaac 480  
 cncnnatanc cctggaggcc ttggnaaaaa ntt 513

<210> 8320

<211> 508

<212> DNA

<213> Homo sapiens

<400> 8320

gttcagagta gctttatattt aatagccaaa tattggaagt gatccaaatg tccatcgaca 60  
 ggtgaatgga ttaaacaacac tgtacagatg tggtatatcc atacaatgga atgttattca 120  
 tcaataaaaa gaaaagaatt gacacacaca agacacaaga atctaaaaaa taattatgct 180  
 gcgtgaaaga agacagacaa aagaagagca cgtactctat gattccattt atataaaact 240  
 taagaaaatg caaacgaatc tgcagggaca gaaagcagtt cagtggctgc cagagagagg 300  
 gttttctcag ggggaagagg cctaagaaaa cttttgtggg tgatggatat gatccccctg 360  
 ttgattgtgg tgacagtttc acagatgtaa acatatggca aaacttatca aattatccac 420  
 tttaaataatt aaccctgtgtt tggatatcaa ttttacctta attngnctn gttttaaaaa 480  
 aantttgnct cncaagctta aaaaaggn 508

<210> 8321

<211> 490

<212> DNA

<213> Homo sapiens

<400> 8321

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ccatatttca ttccatttt attacatgtt cacattattt cctgaaatca tcttagaacc 60
ttttgttttt gcaaaatttt agagggtccag gccctgtgat agctatgtga tgttttttcc 120
agcacataaa gcaaattcat gatgtgaaag aggcaaatga caatagttaa agtatgtctt 180
atthttgtaat aggtatttttt taataaaaaa ttattgtgga acaaggtaca ttaaatttgg 240
cttgcaatta ggaaatatgg gagccggact tgaagagcgt gtgattgagt ccccatatnt 300
aactgatgag gaaacaggct cagatgggtc tattgatggg tccacttgct agaagcaaaa 360
ctggaactag aaaccacgcc ctggcttcta ggcagcaagc aataagtttt tgctaaattt 420
ggtncccaac atttaaaacc aattcccca aatngggaaa gncaaanngg gttttaantg 480
gggntttttt 490

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<210> 8322

<211> 399

<212> DNA

<213> Homo sapiens

<400> 8322

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aatgaggcac ctgngggact ttattaggta aacagacccc agctccagcc acaggcttgg 60
accggccagc tgacagtgcg gcctcanaca cccccgccag gtccctcctt ccctcctntn 120
tcagggtcac cagtgtgtga aanatcgggg catgccggcc acagggggaa gcagggttca 180
ggctgcccc a cctgggtctg gccctggcag gcgccccctn acctggctnt gctgtgggag 240
ccgagaacaa agacatcacc tgcctggctc ctgctgcccc ggggggtcaa gccagcagcc 300
acctnacag nggcctgggc aggggctggg gtgcaaagcc tacccttccc ctgtgagcca 360
gacngnaaat gcatttncca aaatgtntcg aggggcaen 399

```

<210> 8323

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8323

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gttgacacaa aatcttttta ttccccattt gccatctttt ccacaaacct ctcaggtaca 60
gatcggaaga aagtgcataa aaacctgcc ttatttaacc aggcccaccg cctccgggac 120
agcccctggg ggagcccat cccgctaggt agaagggaag gccacaccaa gtgctgagtg 180
agccaccag acagcaggtg ctctgggagg gaggggagc aaggggtagg ggaaggcttc 240
ctggaggagg gagaggcctg gccctgagag acagggggcg gtccctgaaa agggagagag 300
aaggcacact tctccgggaa ccaggcccca gcacctgagc attggacca ggcggccagg 360
aagaacacag gccaaggcgg gggcctgaac caaatgggga ctgtggaacn tcagggaaca 420
gccnnttttg gcttaaggct ngagtntaaa aggaccttct aagggttct ggttgntgg 480
ttcaaagga ttccaanggg aaaccatgcc tncctaggnc ccaccgntgg 530
```

<210> 8324

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8324

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gtttttagtg tgattgcatt tattcttata aatgtacaga gctgtagaag tgcaagccaa 60
gagttctata gagtagtaca taaacacat atggtaccac tcctgctggg aggtaagcct 120
ggatacacc ctctctcag gaaactgtca cctgcagaac acacagcact cagaattaag 180
gcagtttggc cctgggcaca ttggtggtat ttggtatgt ggccactggc cctaaacaac 240
tgaccatttc taccctgcct cactgcactg tcccaccagg tccctccage tttttctaca 300
aggtaacacc ctctacatg gggtcagcca gtcagaaac ctcttctca gggacagttg 360
cagctgaata tgccagagct gattattaca acaacgatgc agagggcctt ggttttgggg 420
cctgncacc tnaccctaga actggttaac acccaagcca ntctgcctga ccaccttccc 480
aacagaagat gtaggctatc ttaccttcac agcancttcc angacaaaac tngggccttt 540
acctgggtgn tggct 555
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<210> 8325

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8325

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aaaaagtga acttcaaata cagcggaggt ggcttctttc ctatgaggct ggctgatggg   60
tgccagatac caaggcccat gtgttactga ggagacagcc tgctgggctg gggtcaggag  120
ctagcggagg gaaacgggta gatctcagaa aaatctcatc actatgccct agtagcttaa  180
tgacatcact agcatgagca catggtgtac ttggcgggat cttacagctc tgttgcccat  240
ctcaagacct aagaacaatt attaagttaa gccaaatctt gcatagacgt ggtagaatt  300
tattgcacat tggaacaaaa atatatattt tttgttgttt tggaaaagac cattagcaat  360
aaaaaatttt ttgtctgtct gtctggtttg gggatgtaca ttggctgaca gcatctaagt  420
tctaagaaga aagaaaaagt ntaaaaaatn aaaattaacn tgacaatggc ataagccaga  480
agccatttcc tatttaataa gtaataattt ggattttcca aaaagnatgc ccattaaata  540
aaattttttt cnggtttat                                     559

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<210> 8326

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8326

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aaaagtttaa ctttattttt tttactaaa gttcagaaat ttctgtaaga cagtacatt   60
natgaaatgt ttccaaagaa atactgaaca atatatactc tagtttgctg aggttccagc  120
tcaagagttc aaacctaatt cttgtgcaat aaaaatcagc atggatctta gatgatctag  180
aatacactgt gttttgaaat ccacagctgg tttcattttt aaccattatg aaaaaccagt  240
actcctattc catcaaagt gtattataag caataataaa ttcagatcca ctgtattatg  300
caacatacat ctttggaaag caacataaac agtgagatca gatcagtaga aatatacaca  360
gttaaaagaa atacacaaag tactgtagtt tttattaaan actactactt gagaaagaaa  420

```

tctttccaca aaatngcata aaactgttga atgatgaaag ggtttgggaa agcttttcca 480  
 aaagcttaat tncaatggat cttnctgang gttggggnc a anggnattt ccttcctctc 540  
 tggganattc ctggctccct ccacgaa 567

<210> 8327

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8327

aaaatatttc aaagtgtagt acacatttat tttcatttgt tattttcttt catagcagat 60  
 tacagagaaa gaaagaaacc tctggtttca tgttctccct ggaaatatta gcattgatac 120  
 ccattttatc ctccaactta tgggggaagg gaaagtaaaa gtgaggaggagg gaagagccag 180  
 aacctttggg tgagggaacac tttgggtcag actgccaggc tacagagtta agggaaagctg 240  
 gccccagaac agtcctgttg cgattctgtt ctacttcctg cattccagca gacttgacac 300  
 tgggctccca gacgatccag gacacaatgc ctactgtta tgcacacgta tcagctgctc 360  
 tggtaggctt gacaagggtt tgctttaaat gaagggtttg ctaatttggg acccttcctt 420  
 catatagttg ggcctgtgcc cccagagca gacattncct ggcctgnata cctgacacag 480  
 cttgngagtt cctgcatgtc cccagcntta ccaatggatc cgtaaagggg agacttcact 540  
 tggcccagct taaaacagg 559

<210> 8328

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8328

gtccatgagg cattttattt gtaaataatnt gtattacatc cctagaaaaa gaatcccagg 60  
 atttttcctc ctgtgtgttt tcgtcttgct tcttcatggt ccatgatgcc agctgagggt 120

gtcagtncaa tgaaactatg gagtggaaaa agaaagtgtt ggtaagttta atagttcaac 180  
 atagtgcctt ntagtgcana aaaacatcaa cactcatcag tggtaaggg cgctttcctg 240  
 tggggcacat aggaactgac agtgcctaca tganctgggtg cctcatgtag cgtatgagcc 300  
 atgactcctg caacccaaag agccaaatnc agagagccca gccacacant cacacaagcc 360  
 ctgacttctg cctacaccat gaaacaaact gcactgaaaa caaaaggctt gggaactnct 420  
 ttaaattcaa aatgttnactt ttctgctttc aggttaaggag actttgaaag tatttcgnat 480  
 aaaacttggg gttttgnaat tgnngtttct ncntgtacc tgnattaata 530

<210> 8329

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8329

atagagagat ttaagtttat tgaaatgtgt tagaaacagg ggaagtatct acaagcagaa 60  
 tcgtaaagcc aaggacattt ccaaattaat agaaaggaag gaaacagaac agaaacttga 120  
 cccatccaaa taaagcaggg gagaagttaa aaaaggaaac aaaaggaaca atacacatag 180  
 tataagaaaa aatgtctatt atttattaca caataattct gaccaccaac aaccaacggc 240  
 gggggcgggc aggagagaag aacatcttgc ttctcaacaa actttcctcc cttgctttaa 300  
 catttttgag gattctttcc caaacctatt acacctgtat tatgatggtt acaaattttc 360  
 caactcttcc actccttcca gtgcattatt tttagtatct tcattaaacg ggcaaaaaaa 420  
 aagatccctt acttgtaata acaaaacaat gttggaactg tcattaaatc aggatagtgg 480  
 aaaacagatc tgttcccaga cttgcaggac ttttaggtta ggaagtcccc naaaaaatta 540  
 aaatt 545

<210> 8330

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8330

gttttcaata cactcatata tttttacttt gtaatacaat atagctgtca catacaatgg	60
ctctagtagg cttaaatcaa attgcaatgg gcaaggaaag ccaaagaagg gtttacacaa	120
tattcaataa gcaacagtat ctgttcagtg tgcaataaaa taaaaaagtt ctaacctaga	180
aacacagaaa aagaatttat tgtttttaag tttcagaaat aaaagtaaca gaatagtgt	240
taatctgtaa caagctgggc ctgtaatttc taaactacag tccaattaaa acatttaagt	300
aatagaaaca atctacatgt ttttctacca ggtaaatata cctgagaggg ttacctataa	360
agaaataggc tttaaaactt ttaaccacaa agaaccttct gctgcgacat tatgaagatg	420
ggctatgcat gtngncagac tnagtcantt tcccggagat tctgctcact gnttaactgc	480
aggtagtggc ccatcaatgg ncagagtntt taccatcaat accagttcat tcaaccaaag	540
an	542

<210> 8331

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8331

actgnatc ctttattaaa ttttgcctta aaaattttta atgctgcatt tttataattc	60
acaatagcaa caaaacatga caattatttg tgtgaaatac agtctaagct ctaaagggtc	120
atagattaca ttcattttat accaggtttg ttcatatata tagattaatt catcacagta	180
tacttatttc ttaatatatc tgcattttat caagtaaaag aattaaatat taaaagtagc	240
ttgacaaaat acagaaatat tctgtgcaat aaatttggtg tcaactgatt catgactggc	300
tcatgaatca tgactgatgt aatcttttta tctttctgcc cagcttctct tacatgatcc	360
ttgggaaata gccagttgaa aagaaatatg gcaagggtatt ctagaatggc cactaaccat	420
agagtctttc aagatgtgca ngttgctttt tggattcttc ctgnaggnga tctggctctt	480
ctagaataca gggatatctn ggattaaaaa agtccgantt tctcatgaa ng	532

<210> 8332

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8332

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ggatacataa tctttcactg tatgtgagc tatcttgagt ctctggttga gatctgggtc   60
actaaggctt ctgggggagc atgtcttcaa caagccttcc aatgaatgtc caaagaaaaa  120
catataattt ccttttattt ttttttttac caaagttctt atgaattgga aaataatttg  180
tttcaaagac ggtgatgaaa ggaaaaaaaa agtttaactt tccaaaggta atgctttcat  240
gaagagttag aaatagcagt tttagtaatt agttgtagga attctggtta agacttcaac  300
attttacctt acttaaaaga ttgctttat gcaacattta atgccagtt ttgcatggct  360
ctaaaaatct ttaaaatgca aaagcttttn cagtgactgg aagccaacac gacaagaatg  420
aaatgggntg accngngaatt taaccngggt tataaaaaaa tcccgttcag agacccttta  480
ccaattaag gaacttagcc attccttaaa tgggnntaac ccttgggcaa                530

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<210> 8333

<211> 348

<212> DNA

<213> Homo sapiens

<400> 8333

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aacatcacat aagtttattt cagatgtaac agcaatgtta aaattgacaa gttaattct   60
taactgcacc aagtaaactt agccatttaa gtattttttt aagttattcc ctccaaaaaa  120
ctgagggagc ttttcttttc caccaccgca ccatggtttc ccaatagttc tctttttgga  180
ggacttttca attgatgagt aaactgcttt agatatttca gaacttcatt ccccaaata  240
aagctaattc ggacaaacta tatattgcat agatttctct acagattctt tgnnttaaaa  300
cctaaatgcn actnaccata ggtggaaatt taggcnantt ngcccanc                348

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<210> 8334

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8334

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cacaaagaat ctttttatag atttttttc ctgtgtggat tctctgatgt tcttaccacc 60
cctattactt ttataggatt tatcaccaac atggattctg tgatgaactg taagatttga 120
tcgccaactg aagctcttac cacatatctc acatttataa ggtttctccc cagtgtgaac 180
tcgctgatga gactgtagtt gtgaagaccg actgaagact ttaccacaca catcacattt 240
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gtacttacca cactccccac atttatatgg tttttctcct gtgtgcaccc tctgatgcac 360
gtcaagggtc aagctccact tgaagccctt cccacactca tcacatttgt atggcttata 420
tccagtgtgg actttttgat gggcttgaag atgtgcactt ccgacccgaa actctttccc 480
acattcttca catttgaatg ggttttcttc actgngggac ttctctgatg ggcccaaaaa 540
atttgaggcc
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<210> 8335

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8335

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atatgaatac tttggcttcc attattacat tagatgaaaa aatcaattca aataagagtt 180
gtcatatcct gctatgatta acaaaaaaac aagtagaaaa ataagagagt gtatttaaaa 240
aaaataatca aatgcttttt gaaagacctg ttctcttcac tgccacacat attcatacaa 300
atgacttagt aatctaatat gagaagtggc ctttactta tattaggaac ttggtaaata 360
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tttgttgaat gaatgaacta tctatggata tgaatttact actttaattt gtgctttttt 420  
 tgaaaaaaag ttttcaagta agagcaatag taaacatact gaagttcaca tttgctcaga 480  
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 gcatttttg 549

<210> 8336

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8336

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 tagactttaa catcaccag gcctctgggt tccaaagcat ttttttctt taatgcagta 180  
 aaaccattcc tttaaaaccc aaaatctctc atggaacccc tacgtatcaa atatataaag 240  
 caggagctgc ccttggtcag ggataatatg tggggcttat ggctctaaga aacacagttt 300  
 gacattcact gctctcctta cttcagttac ctcatggtat agataaatgg gctgggcccc 360  
 gagagggggc atgacctgtc ctgggacacg cagccactga agcctttagt ccagtgtctc 420  
 ttccacagca ccacactgga ttctggagtc ttccagcca gggcagagga agctgcacag 480  
 tgccacgata agaagttctg ggcttctggn acctaccctt taaaactgnt ggnccatagg 540  
 cat 543

<210> 8337

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8337

aaaatcaatc agaaatttat ttttcttatg taagtacaaa acacctcttt tcatcagtgg 60

accccactcc taggcaacct ggccatggtg cccggatgca ggcagtattc aagagtttct 120  
 tccaaagtca ccagggtgaa aagccattct actacaacct ctacatgacc ttttaaagtg 180  
 tacaacttat aggacagtcc tttctggagt actgtggagg gtgaatcaaa gcttccagtg 240  
 taagtttatt gtctggcgaa aacaccagag ccaaaaattc caccaaggcc ctggaaagac 300  
 tgaagtcctc tctgtctcat acagtaatca tccatgagat ctcccggagc ctgggtgatc 360  
 attacgcca tgatacctga ggcagcgtgg actctgccag gggctcctca gacccaaagt 420  
 ggagctcact ttggagaagt cggagcttat ggccgttagc acctaaggat gtggctgaaa 480  
 ngcccagaac aagaaagggc tttagagacc nngcncangg tnantttaaa acttgggccc 540

<210> 8338

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8338

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 gtaacttaag tacagaaaag agttagtaca ccacaagcat tttctacact tttatattgt 180  
 ggtgattgtg agacaaacac agtccaaaca atagacttct tgtcctcccc ctccaacaa 240  
 ctatctgact ccatagctca tgcaccccaa ttacagcagg tgcgggctg gcataaaggc 300  
 ttcttaccag gattccagtt tctcttctc aatccttttc tcatctctaa caaaaatgcc 360  
 acacatacat gtagttgtga gaggcaaagt cttctttaca ctcaccacca gggggcgat 420  
 gggagcacia aagcctnaca aaactgnitc aggatcctgc cttttcaagg cccggaatcc 480  
 gggggcttcc angaattcta acctgggctt ggaaagggca ttacaaataa actngcnc 538

<210> 8339

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8339

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cttcttggt ggttctttgt tctgtccccc atgctctgat gcagtgcctt cttcattttc 60
atcttcgcca tcctctcgaa gaacatgtc taggatgttt cctttgatct tgaagtctcg 120
tgagggtgctg agcttcatgt gctgcatcag gttcaccttg gacttcttag aaaggtggat 180
gagaaatfff tcatactgtt ctatggcaaa gatgagggtta gggattggct tggtttcccg 240
aagaactctg gccatggctg tggcaacggc agcaggtttc tcctttttct ctcccgtata 300
gttcaggctc ttactcttat tctgtacgta agaaatgaaa gaataacaca ggggggtcag 360
atgagaacca gacagcttca ccagcttttc catatfffft ggaattcctc cggagctctg 420
acacacctgg agataatata tgacaagggc tgtaaagtgt ggtgtcattt tgcacaagtc 480
ctttacaagg tgtcacacag ctgctgatgc aaaactgctg gancanctcg tggnaaaatg 540
taagct. 546

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<210> 8340

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8340

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aagatctgtg cgtttttatff ttgtaaacta tatctaaaac atacctcaat ataaaaaacc 60
agaaacaaaa taacaaaaac ggggtgagaa caaaaaatac agatgacagg ttctgtagtt 120
atggtactga actgagcttc ctgtcagcca aaactagaag ggaaacatga ccaccacctg 180
acttgttgca gaggcttttag atctgagcac ttggatctga aaacagtttc tcttttagatg 240
ccttcaaata agggacagta tccttgatga caatacagta cataattca caattctcca 300
agaccatctc tgtgtatata aagggttaacc tggatgaata tttctgcagc aggcattgggg 360
taggcaggca atatgaccaa atatgtagtt tggaggctca aatgaaacag gagaaagagc 420
tcaggaacca tgaagcatgg tgcangtata anggtcaagt attctaacc taagatcang 480
gtgcatgaga actggagang cctcaatctg agactitanac caaagggtgtg gaatnacttn 540
cta 543

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<210> 8341

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8341

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cagagcacia gttttgttta attgatttta catcacacca gaaagcatta caggacact 60
ggcgaataga agtaagctgg aacctcatca cagagctcct ttcttaccct cagcaacaaa 120
aaggcttgat cttagaagtt caaaattgtt ccatatggta aagacacatt cactgcctgg 180
tcaggccttc tgtgatctgg gcctaccctg ttgatccact gtatttccag ctgtttttca 240
ataagcacca tccacacgag tcagtattat ttcaaaaagg cttctatact tgcgatttcc 300
tttctgcat ttctgaattt gtcattgtgc ttatcttgct cagaatttcc ttatttctca 360
aaagtatggg tgtggtacag attttcgggc agcagcatgt aacactttat aggtaggttt 420
tccaattgta ttggtcacag taggcagagt aaattcaata gttttttggc ttaaggnaac 480
aactttcgaa tgccctgaaa ggagtgattc agtaaangaa nggggatgnc nttaaaaaac 540
ttggaccnac c 551
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<210> 8342

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8342

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gtgtcgtgc tatttgaatg catgacagtt tatgtagcta tccttctgtt catggacccc 60
tgagctgttt ctgtggggct attataaatg tgctataaat attctgttac agggattttt 120
gtggacatgt ttctatttct cttggattaa aaagctagga gtagaattgc taggttttat 180
ggtagctgta tatttaactt tttaagaaac tgcccaacag ttttctaaaa ccattgtgct 240
gttttgtgtt cctgccagca cattgtactc tggttgtttt ttacatcctt gccgacaatt 300
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ggtattgtcc acctgttgca ttttagccat gcttctggat atgtggcggt atctcatggt 360  
 ggttttagttt gcatttccct gatgactaat ggacagtact tttcatgtcc ttttttcctt 420  
 ttaattggat aggactcctt tgtgcattct ggacataaag gattgtcaga tttatggggc 480  
 acatatcttt tncactcta taacttgcct gttcttanna gtatctggtg atganaaaaa 540  
 gggttanntt tt 552

<210> 8343

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8343

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 tcttggctgg gatgactgga ctctgcttca tgtatttctc acatcttttc agtacattat 180  
 cccaggcatg ttctcattgc agaggagcta tcccagtcac acaagagttt ttcacgcttc 240  
 tgtatgtgtc aaatctgcta aaacaacatt ggggagagca agtattatgg ctgaattcag 300  
 aatcaagaga tggagacagg aacttgccta gtagtgaggg agacccaaag tcatgtggca 360  
 aagaatatga cacaagggtg gatgaaagat tcattaatgg nctcagtgc tctactagag 420  
 caggcaaggg tgtctaaccn gaatttagta gaatggcttt tgggtgattt tttaaacttt 480  
 cttttgggcc cagtgattaa aggtttcaat gaccggggna aaccaaagtt ttttttaaaa 540  
 a 541

<210> 8344

<211> 496

<212> DNA

<213> Homo sapiens

<400> 8344

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gatttgggtt tanatatagt ttgggcttaa gtatccttta tctcagatta aatgagacag 120  
tgcattgtaa ccacttagaa naatgcctgg aacacattaa ctttcattac taatgttttt 180  
ggtcattctt aaacattttc acttctgcca ccacccttta tgcagtctgg cacatagctg 240  
tcactcagca aatgtgagca aacaaacnct agagacttta gtctgccagg tctntaacat 300  
gcaaagccat ggggccagggt ccatacactc cctccactga gaaaaagacn aatggcttag 360  
gctacaaggt ttgggtcacc aaggaaagct gtcaaataat gaagtgggta agcagattcc 420  
taaaaattgg aacnttttca gcagcagttt cattcncang gagacngagt aatgccctnt 480  
tnaanctggc tcacat 496

<210> 8345

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8345

caagctccca tctagttggt ttaatcaaga acaggctcgc taatccgtag aaacaacaat 60  
gcttgcaata caaagtagac ctcttaaacc aactcaatct atagaagagt tgggcatcag 120  
tgagtatttc cagccataac aacatttatt agttctctgg taaacatttt aacatttctg 180  
aagaaacagc aaagtgggca tgtatcttta atgtggagca ctggggacat atctggagac 240  
ctacaactct gaggaacaga gacaagtgat ttgggggata ttctcgatta acaagccaaa 300  
gaatcaggaa aatgggctgg aagcgggtag ccacacacct ctctccctgt gtggggcctc 360  
taatattgga ctgatgcctt ccttttctgt gcctttgaaa tctcatgcaa gattggctat 420  
aggtgaattg tattacgaaa ccatccaagt tcttctagat tttattggcc tatcgcaagn 480  
ctctcttntt aattcaaaaa gcngtnttc ngaaggctct tnaccctct ttttnttgg 540  
ggtttaaaag gaagg 555

<210> 8346

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8346

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atgttctgac tgaagccttg ngcataaaac gaccggctgg aatatttact aaattctacc 60
ccctntaaa attataagca gtatttgaac tacttatgct gagctttctt catgatgaat 120
ttggcatggg gtttggtagag agaacaatg ttggctttac tataaaaaag gntgtgtgat 180
ggtaatttaa atttttaaag ctctctgaga gagtaattac nttagtgaag ttaaaatcag 240
aaagngtaca atttttcttt ttactaatac tgnaaagaaa aaggagacn tataatgccn 300
agagttaatt tgntctgaaa caattatact ctttttggaa gcctattgca atttaagaag 360
aaaaaagaaa acttgcctaa caaatatcc catnccaaac atatctagta aattcaattc 420
tttcacactt aaaactttat gggaaaagtn ttgcaaataa nggcatatca tttcaatgga 480
cttttatttg ccgnaaaaaa ccnncttttt attttagngg ggaan 525

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<210> 8347

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8347

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gccaatcaca aaaaacagac ttatttgaag tatttagcac taaacccac acaattccag 60
ctctgtagct gaggacacag ccacttggca atggcaccag gtgttataca agaccaataa 120
gttaatgtaa aggacgctta ggtgtggagg gccagtgtc agccgtctcc tggctcagaa 180
caaggcactc tgggctccag ttaggacact gagaggccag ggaaaccaac atgccctgga 240
gaaaggggct tagagacaaa ccggaaaagc acagcatcca agcagggtat tcacgcatgg 300
ggggcagagt aggcccaaaa gttgggggtt gctgatgcgg taagagcaca gtgagagaaa 360
tgccaggtgc atcccttcag cctcctgcat cctccccag gttcctttga tgggccatcc 420
tgggtcttcc ttgnaccct tgtgcaatcg ggtcatcggg ttcttttcag tnganaaaac 480
tgggcctttt ntanggcaaa cccccaaatt tttggaacct tttggntttt tcaaagntgg 540

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tcc

543

<210> 8348

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8348

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agcttaaaga catgaaaaac ccagtgagtt tttattgaat agtctctctt gtgttaaaag   60
tacatattca ggactatact atgttgattt tggaaatatt ctgatgtgtt taatacaaat  120
tcgtagtgtg ttcagagcat tgtatgtgtc tcaccaatgg tacacatttg gattaagcag  180
taataaggcc tataaaagaa gaaatgaaac aatagttttc aacaataaat gcaggaagaa  240
aaactgctga tggacccaac tgagaaaatg tcctttttaca ctatcccttg gtggtcagtc  300
tccctgaatc tgggtgtgctt ataattgctg ggaaggcagt gtaaacctgt ggccatttcct  360
atgcatgtct gggaggacca cagccctggg gtggagcact gacaggtttg actttccacc  420
agaattgctt gctcagctta atcccataat attcctttcc cttagatttg gtttctgnct  480
cggtaacttt ttctctctgc atataaaatt tcatggctta aatactttta agtcngagat  540
tggnnttt                                     547

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<210> 8349

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8349

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cattttgaaa aagctattta ctttttttcc aaatattatc ccaaataagg gttttacaga   60
taagggtcaa tacgaagtca aacattctac agaagaaaat cgtttttaca gacattaaga  120
ataattttta cagaagaaaa agctcacatc tatctagatg tggctatgtt ccatgggaaa  180
aatttcagca tccaaagtgc aaagaaaaaa tgactgtagc ttttcttacc acaaaatatt  240

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gacaatcttc ccttatagcc tactctttat tgttagttag gatgccaaag gatgatatat 300  
 tgacctttag aagttgggct ccactggaca aggttggggg tatgggggcc aagcatcaga 360  
 atgaattcaa ttttaaaaga aaaactggct ttgaccccaa atgaacccaa agttcagcca 420  
 gcggcacatc agagataaat acgagttgta ctttcacatt tacaagggtg tgccctcaac 480  
 actattaaag acctaatac tcaaatacaa gctcccatct tccattacta ggtcttgncc 540  
 caaagggatn c 551

<210> 8350

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8350

ggggctatat ttacaaatit tattttttta tcccaaaaat acatataaat gaaaacctgc 60  
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 taacacacaa tttacatata tacatacata cacactatat gtaagcagca aatactttgc 180  
 tacttacaca tattcctctg gtggaaaact aggacactgg gaaattcccc tgctttccaa 240  
 ccttggaag gtaaatacaa cctctctcaa caacttttta aaggatgaaa tgtgtagaaa 300  
 catgtaaaca acacaacctg ctttagatct atacatgita ttagaataaa gaaagaacgc 360  
 tgtcacatca gtgacagttt atttctcaaa gaaaaaaga gataacattt gaataaaaat 420  
 gcaaaaactga agtacagtta atatgatcaa aattgttgtg tcatgctcca tggagaaatc 480  
 angaattctt tnccaagnac agattcccaa gncnatttca ancactttgg angctgaatt 540  
 a 541

<210> 8351

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8351

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gatgcacaaa ggttttaata ccttggcttt aatgattttt caaggttaag aaacaaattc   60
aaattggttg gagcttcaac tcagtaatta caatcacaat gcattctctga aaggccctgc  120
atttggaggc agagtaatct gcaaagatga tagttttttac atatgtcctg ttacctacac  180
caatataatt actacattat cttataaaga caaacagttg cttcaaactc tttaaaaaat  240
atatatataa tgagtttccc aaagactcga gtctatattc aaagatgagt aaaaaaaaaat  300
ccattacttc cctagggtca ctttcttctt ttactcctgc tttaatgcaa aagctgatag  360
tttctgattt gtagaaaaat ctaaaggttt ctgcttttta gacaaattca gggtcttttt  420
tgctttttct tcttggtttt ctgtttcatc actttcatca accacacgtt ttcgcttctt  480
tgcttcagtt ccttcacttg gccggttctc ctttggcttt ggtagccac accctttctt  540
tctttaagtg acaatacctc tnaa                                           564

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<210> 8352

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8352

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cagagctaaa cacagtaatc atttattaat tcttgagaac cattatgaat catataatag   60
tttaaaagag attcaggatt accactttca aatatatcca ctgacgcttc caaagtagtt  120
taatgaatga ataaacctat ttgtttgtat ataaatggta tacttggaag agctcaaaac  180
ttttgtatta cttatatgtg cacatacatt agacacttcc ctatcatcat ttttactccc  240
ttttttctta gcaagccctt tctttccaag taaacttcag tcagactccc tctggctgcc  300
cacaaatcct caatcactgt tggccatga aggtttactg cgttcattta ggtgctcact  360
cctccctgag gctcattecc tcctaaaact tctgagcacc ccggaattac tggccccatg  420
tctctctctc tcctttacca agacagctgc tgaggctgct gctatgcagg tctacctgcc  480
cctntctggg cctctgcttg ctttacacca atgnccctan cccaggtggc agtatctggg  540
ccccccatt tt                                                         552

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<210> 8353

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8353

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ctttaaacct ttttttattt agagattttt ctggttaagga gatataccat aggaaagcaa   60
tttcactggc agtgaggat gtatatactc taccaaaata ctccttattt taactgtttt   120
taactttatt tacatacgaa gcaaagaatc aatgcatatc cttggttcaa ctatagtatt   180
agccatacta catgaaataa aatgggtgctt gcatacaaaa acttggttgtt tgtaaaggaa   240
tctgatttca gattaaaata cctaattgtt ttiggaaaaa atttttaaaa agaatacaca   300
tttatcatga ccaagacacc tgcaccatat ttccattcc tcacagcaca tttatttcag   360
taatcctggt atgtcgggtc ttagcatgag catagtgtta cacgattttc gtacatataa   420
tcacatccaa aacaagctct aaaatttaaa ttgnaaacat tctcatatgt agaaatattt   480
taatngggna ttaaggtttg ctaactggtc aaatttggaa gatatttaat gngacgttat   540
ctnaactggg naggg                                     555
    
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<210> 8354

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8354

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caaagagtga aatttattta ttggaattc agaaattcca ggttgtatga catcagttac   60
tcaataagtg tgaattctcc aactcttctt ttaatcccat tttagaattt aatatagaga   120
tctctgattg gcaggaacac tagaaataaa tgttccatgg ccagtagtgc aaatggggga   180
ttgtaggttt tgaaaaacca ccctaagcca tattaagggg gttggaagaa ccatcgaagc   240
ctaaggcata gaagaaaatt tggggttaag aaagatgaag aacaaaaaac agctttattg   300
cttatacatg accaagaaaa ggaaaacatg gcaaaaaaaaa aaaaaaaaaa aaggcaagat   360
    
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gtgtattcct tgcaaaagaa caagcctgct aacttgggag gaagggaagg tcaggaccca 420  
aatagagcca atttcctgga natggcctgt tctactggca cattttcctg agctgggctt 480  
aaaactttca gggccttttag ggcccanaac catgctgcta aaaatntttg gccaaagtct 540  
ttcacaaaaa at 552

<210> 8355

<211> 244

<212> DNA

<213> Homo sapiens

<400> 8355

aaatttgact cattcaaatc ttggcaatta gcatgtatag tatgttatga gagagagaga 60  
gagaaaatta gcagaaatgg aggaaaacat attacatcct aaataccacc aaattgccaa 120  
aatacacatt tgggtagtaa tctccagaga actctctgga ggcacagcat ctatcatgct 180  
gatttcctg aacaatatta cagaatagcc ctgtgtactt tctttggggg ggggaggnnn 240  
nnnn 244

<210> 8356

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8356

aaacaggaac ttaggttaat ttaatagaaa aaataaaata tggaataaca ttgattttgg 60  
ccagtatcag ttacaaccgt tctactatat ttacaaaaa aacaactgaa cattttacac 120  
ttgtacagta tttttcagta aaagnggatt tggatttaac aatgggtcac taattgaaaa 180  
taaaaagaca aaagaaaaca gaaataggac ttttgtctnt agaaggtag agcatttggt 240  
gagtctccaa actttgnact atccattaca tatactctcat tatgaatata tatatttatn 300  
cntaatatat aacattaact taaactttga aagcattatg ttctagttaa taatgttatg 360

tagataaatg aggcagtaac acactagtag ttaaaccagt atttccgnga cgtgcacctg 420  
catggtcagt gggaaatgga atgcacgctg gtagacccca gtgaaatttg gtggcatggt 480  
gatgggtant ccgntccaaa accggcctna ttttancitt ctatnaatcn cggna 535

<210> 8357

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8357

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cagcctccgc ctcttggttc aagcaattct cctgtgtcag cctcctgagt agctgggatt 120  
acaggcacat gccacaatgt ctggttaatt tttgtatatt ttgtagagac agggtttcac 180  
catgttggcc aggttggtct tgaactcctg tccctgcccg cctcggcctc ccaaagtgcc 240  
gggattacgg gtgtgagtca ctgcaccag cctaagtgc tcttttgaat cacctaattg 300  
cttgtagagg agcaatggan gggcacacaa gaggggtaaa gcacagagaa catttcagaa 360  
aatgcaggaa cctttctttt gaggcacaac ttttgnaca gggcaacccc acccaaggag 420  
aaaccagtca gaggccccaa ctngaagctg aatgaaggac gatccctntn cctggcctgg 480  
ggagcctggg gtcaccttgc agacaagatg gtccaggaat ttactntga ctnttggttg 540  
aatgagcctn ttttacgggg ggg 563

<210> 8358

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8358

caagtgtagt cacagtttat ttctgatgtg gctgaatcta gggacaggcg ggctgggctg 60  
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cctgcatgga caccatgctg ttgctgcca acaccgtgat gccagcgcc tgggtgccggg 180  
 cgtgcgtctc tgcgtaccac gtatgcatgg ccaccgagtc gaaagtgggg atcagggtca 240  
 cctgcaggtc acggtcceaa tgctgcttgc tggccagtag cgcgtccagg acggcccgcga 300  
 tgccttcctc cttgcgctgg tcctggccac tgatgacgta gcagagcgcg cgcacgcgct 360  
 ggaagaactc ctcatccacc aggtgggcgc tgctcccgtt gggcaggtag gccagggtcca 420  
 ggtagaccgg ggacttgggt ggggtggctg aaccccggcc cggctgntgg cttacccccg 480  
 acggcctnga atggcaatct tgggggggta ngactttntg gaaagggtgc ccggcttcct 540  
 tttantgggt tanttcng 558

<210> 8359

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8359

agggaaaagt atatttacta gacttccata atccatactt actttaaatt caatctagaa 60  
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 aggtctttgc taactcacia atttagcata catgctgcaa aaacatctct cctggagtcc 180  
 caagggtttt caaatgttcc accaggggca gtcaagacta gattcacggt gctctcttca 240  
 tcatgcgcac aaaatgtgtt ttcccataac accatattat cacaagtcta tgaacaattc 300  
 tggtagcta aggtaggcag tatagaactc ttacaaata acagtatttc aattatgcc 360  
 tgtaagtaaa caatttgctg tgaactgtcc tgtgtatcta atcatttaat acattgcttc 420  
 tataagaaaa tactatttgn taaattttag tcataatttc attggttctc atcatagact 480  
 gcagatgcc 540  
 acattaatgg ngaaccaaat ggtaaatctc aattttcttt gacattttat 540  
 gctttggaaa ttcanaan 558

<210> 8360

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8360

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ggaaattctt tacangaaat tttatttgag atctcaagnc cttataaaaa gtgcattaca 60
tcaagattgc aaaagacact ttttaaata gagacttcta tctactcatc cattttaccc 120
tatgattcat ttcctaccct aacagaaatg atgaaacagt tttctttct tccttttctt 180
cctcctgctt tgaaagggca actgtcatga gggatatctt aacagaatgt gccaattaat 240
ccttgccagg agagcagtag cttcctactg gctaaattta gagagccctt ggcatcctt 300
ttgggtgtggc tcaaagatta ttacaagctg aatctaaaag attgcaacct actacttgca 360
atctgtctcc ctgggctcct cttttactna caaactccac tctaaaacaa ccttaaattt 420
taagcactca ataattgctt tagaaatgaa gggatctaaa ggtaattacc ttacccttgc 480
aactattttc tgnataagaa tcttcaaagg tnataaaaat tntccgatg aagaatggcc 540
taatcctaaa anggggtgga t 561

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<210> 8361

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8361

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agttagaacc agaactttat tgtagcggat acactttctg acctatcatg agtatacaca 60
tctgcgaagg gaaaccgcgc ggcgacagcg tgaggacatc ccctgggcgt gagcgtctgt 120
ccgctgtcta aacagagcag ctacaggac gggacatgga ggatggccac acatagcaca 180
gccaccagtg tcctcagaac tagcagtcag ggtcacagaa cagtattcaa aatgattgcc 240
cacctgtttt agaaatctaa aattttacat gtaactaaga gcaaagtgt atgtgggttt 300
tagaccatga ctgtttgttt gctctcctgc cctaccacca agcaaagcag cagggtcct 360
gggggagagg gatttcaacc cccctgatgg caggggtgc tctggggagg agagaggaga 420
gaacaggctg ttttgggaaa attccagcac ttgacttcg ggccatgcgt cttntnctgg 480
acgttctgag tacggatcgn taaggcctct ggccgtttcc aaaaggagt gcaaccggct 540

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tgaggaacc tnttaa

556

<210> 8362

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8362

gtgatttga catttattaa aaagtatttg tcatcagtaa ccattttgga tacttgcaaa 60  
tattacagta aaactctgcc ttaattcaca gggcaggagt agaaaatcaa ttatgtaaaa 120  
tacagtgttc cttttttgca acattaacca gaaacattgt ttatcagttt gtactgatat 180  
ttaaagtga cacatgggta catatacaca cacacaaagc taaacttcag cagatgggtat 240  
aatgtataga gaccaaactg taagaaatgc agcacatctc tgctcaagat ggaacaaagg 300  
gtgggaacta accccaatag ggttacaatc aaattaatgt tatttcagat catcataatg 360  
cttattgttc tacatttcaa atatttactt gaaatgattt tattaagatt acttgcagga 420  
tttctccttc aaatcatttt aaggtttaaa aaatgcctta aaaatttcaa acctttanct 480  
ttacatcttt aggtanttag caaaagtnc tngccccctac atgggttgna aagnnccaat 540  
ttggaga 547

<210> 8363

<211> 462

<212> DNA

<213> Homo sapiens

<400> 8363

cccaaattac caagaacctt tatttaacct accaaactaa aagagcaata aaataaaaaat 60  
attttccatc cacaaaacgg ttttacatca actacactga ccaatacaga gaaaagggaa 120  
atccctgagg aactgccaac aataaataat atacttaaaa tagaatgttc tgagtgtaaa 180  
ggaacatttc ctgagcccgt tcagtttggg gaaatttggc cttttgcaaa attcagtttc 240

tcaaaaggat atccaactga tgcaagtttc ctgtcatgac aagaagctgt catgttcagt 300  
 agcaccttac acgaaagggtg gggaaatagg ccgggcgcag tggctcacgc ctgtaatccc 360  
 agcactttgg gaggccgagg caggtggatc acctgaggtc aggagtttga gaccagcctg 420  
 ccaacatggn aaaaccctgn tntntnctaa aaatncnaaa aa 462

<210> 8364

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8364

agaacaaaat ggtttttaatc aattgcgtca ccctcactct cctgggagcg gagcaacaaa 60  
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 cccaggctgg gcaggcaggg ggtgggaagc aggacagggg gcagggaggg aggggtgggag 180  
 gcagggagga aatggcaggt ggctggaaca caagaaagca aaggggaccc agctggtcct 240  
 tgggccccag ggcccagccc caatactcct gctctccctt ctccctggct agagaaaggt 300  
 cacggagaag agacagggga gcaggtccca gcagcaggag aagcagcagc agctgtttcc 360  
 ttcaccaata aatatacttc attaccaagc tagaagagag ggggtgggaag agggactggg 420  
 gtgggaagga agggggagaa actgccacct gtgttgctgg gattaaagca atgagatggg 480  
 gccaganccc ccaccactat nctaaccttc anttggcttn ttnaaactgt gaaaaanctt 540  
 tttaaattgg cccccttt 558

<210> 8365

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8365

aagggtgaag aggagtttta tttagtgtta gaagagctca gaggagtggg tagctcctct 60

ctggagacag attgtcccat gagtcaatc attcagctct caacagagag gagggccctgg 120  
 agagagtggc tcctctccgc aggcaagtca ttccaatgtc tctgcaggtc tctgaagctc 180  
 gcagcagagt gtagctcctc tctgctggca ggtggtctct gtagctttca gcggagaagg 240  
 tactcctctc tgtagctggg caccaccgc tctccagcta tcagcagaga ggggtactgct 300  
 ctctgcagct ggatcctctg tcccctcgtc tctaccatct tcatcctctg gctattctct 360  
 gcgctgctct ggctgagcct agggttttta tggacctcag cggggaagaa gtgtgtgctg 420  
 attgggcat tggcaggccc anaaaaggct ccacgaagtt tncactctgg caaanggact 480  
 ggcanccac cccagaatt caaggccctc ctggcctgaa ggtgggggct tactggggac 540  
 cccanccctt cttcctgttg cant 564

<210> 8366

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8366

cagactttaa agtttttatt attttatatt acgcatgac ttgcatggaa tgaccacaaa 60  
 gtggcataac cttcctgggc atgtaactta actcatcagg cctggctaga aagtgagaac 120  
 tcccagatac acaatttagt ccaccagaaa catggggagg agcaaaggaa agagaaaagag 180  
 acagaggaag gcacaatgat aaataattat ctgcctcttc tctaataagg tagtggctcg 240  
 ttctaataat gatgataatg tcattgaata caatctctga ttcatgggtca aggtcttttt 300  
 gttaaaggaa aggaggtttc ttagaaggac tggatctaata caatacatat ttgatgttca 360  
 aatgtttgac tticaaaca aatttttaca gccaaaataa aatgaaagaa atgatactga 420  
 caagctctct tgccatgcc ttgtcaaagc acccacagaa agaataagtg caaaagggtac 480  
 aaaggccctt cccttcatcc aaggaaacat ntncatggga gtntgtcagc cgacttcctt 540  
 tccntacca accccacacc ttaggtca 568

<210> 8367

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8367

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gaaataacat tgtgacttaa aggatttcta ggtcctaaaa tctggaaaag ggatctggaa 60
aaatttggac tccatgagta gtttggattc aatctctctg tgcttttttt tttctttata 120
acaggaatgg gatggggggg ggggggaata aaacttctta tgctatatag gtcattgtact 180
gtgagaaaca agaatacaaa actatgggtt taaaaacaac atatacagaa ataatcgcca 240
atctctgtct acctccacat cattntgtca tagaagttca ttgtgattaa aaagtttaaa 300
agtttttaag agaaaaggta gattgagaag tagaaaggaa gtaggaagga aattgtgcaa 360
aaaaagaaac agtttattag atactctgac cctgggacac actgttcctt tccccaaaat 420
attttccgtg ataggaactg aatttaaaat taccaccttg gtagaattgc ctggaagatn 480
cagcaactaa aacctggatt aatgccactt ttcttaaaaa atgccatta actnttaacn 540
ctggcngaaa aatggttaatt aattttt                                     566
    
```

<210> 8368

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8368

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aaattgccaa tttatttttc tacccaatcc agtatcaacg atatacaaaa ggatataaac 60
agactatcat gaatatattac aggatgacac accaaacaat taccaaggaa caaatcctgc 120
aaagtaacaa attgttgctt atccatgtcc actcaactgt acaaggttta tttctaggac 180
aatttcccag ttctctggga aggaagttct gtggatttat accttccata aggggtcaagc 240
aaacatgcta agagctgata ccatcatgtt tttatactaa cagccgagaa aggcitttaa 300
agaacactct ctttcaggcc aatgttacag cattagtggg ctcatagaca ggatgtgact 360
tcatcaaagg aaatgcttct ctctcttgg tctccctaan gtcctcctcc tagtacacag 420
gaggagtcc ccataataac accctgggtt ccaacanaat ggnggggtag attatcaacc 480
    
```

ccncaatggn gaaaaagaaa ctggaccccc ttacettacc aaatccattc cagaatctgg 540  
gggaggcagt ttncaaaatt tttacaggn cgaccctttt n 581

<210> 8369

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8369

gagattcgac cacaaacagt tttaatggtc tggttttctc cctagttccc caactgtttg 60  
ttagtattat tattactaca agaataaagg attcctgaga gcctgtcccc tcctctcctg 120  
tggccccctt gacaggactc atccctacca acccccacc ccccgcccc ggatttcttg 180  
ggaaaaaaag aagtgaaagg cactgcaggg gtagggggct tgagtgccan tgagttgggg 240  
ttgggcgggg gCgggggCgg tggtagggcac tagggcaggg cccggcctag aggaggaaag 300  
ttccagtcca tgcctgaagg aattgtggn aggtgtgtcc atccatgaca ccccatcag 360  
tccttcctg aacctgtcta ncaggcntac ctaagtccca tntcccacc cccaggccca 420  
cactgggggt tctgnagcag gagcataaaa ttaattagtg ttggctcaca aaggaggaat 480  
gganngtcca ttntattgga ctccaangn caaaacccaa agggagggtg caaaaaacta 540  
ggataatcct caaatgctct tntnttaa 568

<210> 8370

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8370

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gattctgtag aaatagatcc ttctgattct gcatctcatt tccttatggc aactacaaca 120  
ggaggaatcc agctggaaat gccactaacc ccacaatcca gcacctgaga gaggaagcca 180

gtcggagcgc cgtgctgggc tcactcactc tggcctgcgc actgggggttg tcacatccat 240  
 tttccactgg ctatggggaa taatatttgg ttaaggctgt tgaagccctt gcttttgagg 300  
 ttttacatta tttggtaatg aaagccgttt tttcttcctt ccccaggctt atgtgaagaa 360  
 gcccacgccc actctcaaca aaacagactc ctccttggga agcatctcca gccctgggac 420  
 agacacctcg ctgcgactta gggagggaca ggattagccc aggaataaaa gcattttaga 480  
 aatggtttct gcaccttcan agctcaacaa ttcttgnacc ttttanatgg aagggatcna 540  
 aagtgaacana acctgttttt 560

<210> 8371

<211> 450

<212> DNA

<213> Homo sapiens

<400> 8371

gaaatgatct gtcttttatta tgtcatcaga aaacaaaaaa atcccccgag tgtaaacagg 60  
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 tatgtttaca gtcataaaaa aagaaacagc ctggagagaa gtgggggctt tgaggatgga 180  
 gagaagacng gggcagacac agactccaca tctggccctg tgggatttgg ggttcccata 240  
 ctgatccaag ggctatttag atcttcagag ttaggtgaca atgggatttg atttccttag 300  
 ggaacaaact ttgtgaaact gatcagaggc tgagatccag tccctagtat taagtggggg 360  
 aggtgagggc aggnaatgtg aggggctggg ctgggtntta gangctgaan cccaggantc 420  
 ttttcacctc ttccaagaat ggggcccccc 450

<210> 8372

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8372

acttagaata tttattttatt ctctgacatg acaagacaca aaaagttaca acttcttaaa 60  
 actcttcaaa agaaaaaaat ataattctgt aagcagcagc agcagcttcc aaggttctga 120  
 tgtgacgggt ggggcagctc ccaggagcaa ccgtgaactg ggggggtcca ggcctgagcc 180  
 ccaggtagtg tcgctgggaa ggggcctctg tggaggggccc cggttttggg gacacagcac 240  
 cagcacatca gggctctgtca ccaacacgat cacatggcca gggcggggca gggagagctt 300  
 cggctcacag cagggatcgc ccggtggcag gggggatggg gcttctgaag tgtggtcagg 360  
 ggccttatgc ccggaggcgg gaaggatggg gcttctgcag tgtaccagg ggccttatgc 420  
 agaggctgaa aaaggagggt gggccctgaa aaggacttgg ggggtgtggca acttctggcc 480  
 ttccttcana acaaggcaag cacccttaag nttcacactt gtcccaatgn c 531

<210> 8373

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8373

ctttaagtt ctgttgttta ttttacacaa aggagaccac caacatttgc cataaattct 60  
 tctaaactct ttaagaaggc catcttctgc ttccgatcca gcgtaggagg agtgctgctt 120  
 gcagtgagct tgttgaaggc atctgctaata ctctggtaaa taactgggtc ttgctgactt 180  
 gatagtaatg tttcgaccag ttcagaatat tcagcctggt gcaaacacac caacgtgtag 240  
 aaagcttcgc cagccgcagt ggtcatctct gtgttgtgct tttgcaaac cagcatatca 300  
 aaaaccagct taagaaagtg ccgtgttgct agaaaaagtg gtgagtctgt ttcttngnct 360  
 tttgcacact gttcagctaa cggtgtcaag gctncaggc aaagctggca aaccttcgaa 420  
 ctcatgatg cattcctaata tctaggaggat acatcagact tttnaacaga tcctcangaa 480  
 acttggggan tttttcaggg aaaatttccc cgattaatgn gnnta 525

<210> 8374

<211> 521

<212> DNA

<213> Homo sapiens

<400> 8374

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agacttttag aaaccttggt tagtcggtaa caacattcag tagataatta agggaacaca 60
ctgcacaaat tcatttccca cttagcctga ataagcagtt tgactactta atggtttctt 120
attgtaagtt ttcctatggc cagggaacac agctttgtaa gtagtccatc tttctaaaac 180
tgaggtaact ttctaaacat taaaagtctt tagtaacata ggggaaaaat taaggcttaa 240
ttacttagaa aacaaaatat cacaattaca gaagcacatt taattacaaa aattataaaa 300
ttatattaac tatatgtagt ttttaatatc tagtatcaaa ataccttttc tactttggta 360
actaaatfff tgagattaag aacaaactag ttcaatcatt ctacataca aaaatttcat 420
ggttatatff attaaaaacn aaataatgcc aggtctggtn aaggtacat ttttcccag 480
ataatatng gaatngggga accgaattgt aaaattcaat t 521

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<210> 8375

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8375

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gggatgggaa aactttatta ggtttggttt ccagcttcgg ccacgcgggc tccgcccgcc 60
ccgagctcgg gtcacggggc gcccccgccg ccctcctcgt cgtcctccac gtcgaggccc 120
gggatgccgc ggatctggcg ttgcagcagc ccctcccagc aagggcacgg cgccctcctc 180
ctcctcctct gggggcgggc gcggtggcgg caacacggnc ccgggggctg gctctggggg 240
cacgggaggg tgcgccggca cgccctctgc accctccgag atccctgccg gttcgccctg 300
cgccccctcg tccagggcac cgnccctcagc ctgctcctgc tccttctctn ctcggggctg 360
tcggtgaaag ggntctcgcc cttcaggtaa cgctccagct tnttgctgat gaagcttggt 420
gttgagaata ctggggggca ccatgaagga ggactttttg gactggtcca atatgagcct 480
nccgnttccg gttgggaatc catgggcttt aaanncttnt ggganna 527

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<210> 8376

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8376

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aaagaaaaac aaaaagaact ttactttcct atgttaatac aggtcaagag accctttcct   60
ctcaaaaggg ttggtaacac cagttcttag caataaacat aaggcacttg tttagattac  120
aacatcactc ctttttttcc acttgttttt ctaaccctgt ttttccccca cagtatcatt  180
tgaaattaat aggatgaatg aggcaaatat gagacgatcc agttgatact actcagagca  240
agatagtaca gtacagtgtt tcaggggtga tgtctggaca taaaatgaac ccagtcaagg  300
tcctctgaca ccaatgtatc cactatcaag taaacctgaa agaaaataaa agattttattc  360
aatagttcca gtaaaattgg gttggaatac aatacacatt aggaatttag cttctcacgg  420
gtggnatctg catcttaaga ggtctgagtc ctatgaatat tcattcttag acaattcatc  480
ttttggacca tttnaggac caattaaang aattcatttc aatatac                    527

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<210> 8377

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8377

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actgtgaaaa gtttatttgc atcgattaat tccttttttt caccatcata agagatattg   60
acatttgttt gctatttgtg atcagagaaa agacattttg gaatggataa tctgtttcta  120
ccattcttta aagaaaaaag ctttaaaaac aaaattcaag tgcaaaaatt tccagtagtc  180
ttcctacctc cagtgtaccc cagcaaaaata ttcatactgt tgctgttagg aaattaatca  240
accataagct tcaattaccc actttttttc ttccctaagg tgtctgtact tatgaaaaca  300
tatatagcat attcctgaaa gtataccata ttcctacaaa gtaaggagac ctagaagcaa  360
cagtgatcac tgcctttcag tgtctccaac cccatgtaac cactgatagg ataattcagt  420

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ctctaagtca ttgatctac ccatttccta aatacagcga tcaacttcta tttacaacag 480  
ctagtctggg gttactaaca cgttccccca aaatcaatag ggcctg 526

<210> 8378

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8378

attttaatca gatatacaatt tattatggaa ccattcattt tctgctcatt agcactaaac 60  
attttttttg ggtcaagtat ccatgtcata ttatgtagaa aatggtcctt catgccaaca 120  
gacttacatg tataaaacat gaacaccccc aaactctggg gagtattcca gaatggggca 180  
aaagagaggc tgggaagtac catttactac acaaatgtaa taagatggac agaaaccttt 240  
attagagttg gaaaatcaag ttggaaacaa acacatgagt tcactactta atgcatttaa 300  
ttccaacccc tcatttgaat catcttggtt acatttaaga ttctacaaca gttataatgc 360  
gacgattcag aggtgggtctc aaagttgtta cagtgttaaa aaaattatag taagcagtat 420  
aaaattcaat ttattatggg gccagggggg attcacaacc attctttaaa accnttagag 480  
ccaacccng gcaagccttg nggcttacac cctgnaatcc cagacttttg g 531

<210> 8379

<211> 401

<212> DNA

<213> Homo sapiens

<400> 8379

catggcacag agtttaatgt gaatcatgag atgagacaaa agcctcctcc agggcgatgg 60  
gaagaccag ccccaaacca gactcttgag cagcgagccc taaaccagac tccgggaagg 120  
ggctgcgtgg tcatgcaccg cctaagactc agaggtgaag atgggaagac ccagccctaa 180  
accagactcc tggaaggggc tgcgtggtca cccatgcct aagactcaga ggtgaagatg 240

ggaagaccca gccctaaacc agactcttgg aataggctct gtggccaccc atggccgtaa 300  
 ggctccggga tggagacagc atggacaggg acctngcaca aaggcatgtc gggagggcct 360  
 cctttccaag gnanagnccc acctgntcct tntaagcccn c 401

<210> 8380

<211> 493

<212> DNA

<213> Homo sapiens

<400> 8380

gaaagtttta tcaaagctaa aatttatttg gtgcatactc ctcttgatat caggtatgtt 60  
 cgcatatacc tttttctttc atgtgtaaaa acaaccatgt gaggtatttt acaggtcaaa 120  
 agaaaacaaa aactacttcc ttattcagtg taaaggaggc ttataagcat tccaaaataa 180  
 aaacaaacaa aaaccagaca agtacatagt ctatttccat ttccttttat acatcctctc 240  
 tatatatcac acatttagca ataggagaat agagaactaa ttcaaatgca agggaatctt 300  
 tttttagat tctgttgaca gatgctcttt aacctaaaca ttttctactc taaacataac 360  
 ggacttaatt gncctcagta cgtgaaataa ttttaaggng atctagtact ttgaaaattt 420  
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<210> 8381

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8381

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 agcctcccaa gtagctggga ctacaggcgc ctgccacat gcttgggctaa tttttttgta 180

ttttttagtg gagacggggt ttcactgngt tagccaggat ggtcttgatc tcctcgtgag 240  
 ccgcccacct cagcctccca aagtgcctggg attacaggcg tgagcaacca cgcccagctg 300  
 tcagacaaaa tttttaagaa aacaaaattt tttccagaat attacattac aaaaatcaat 360  
 gaataaatga actacactgn aactttaata cttattccat atgaaaaacc aaactgggtc 420  
 tggcaatttg attgatctct tgagaagttg cagtgcattc attccatggg tnaaaccg 480  
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 aaccaa 546

<210> 8382

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8382

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 ctcatgcaac acgacgctca ccgcggtcgg ggccgtgggg ccgtcagaga aaccttttta 180  
 aaaaatggag atgaatgtta cagaattgga caaccggaac tgcttttcaa aaccagagga 240  
 aggaggttct tagccgttac tcagatacca atgctgggga gggaggcctg acttcagcaa 300  
 cagctgtggg tgggctggag gccggcgag cttggggccc cccacgccag cttgtctnaa 360  
 ccaccacctg tgcggggctt gcttcaagg gtcaacaaga gcaactgatg gcttgcact 420  
 ttcangcccc gagagacaag gcttacgtac tttacttgca gccaggtcc aagccntgg 480  
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 aaggaangct 550

<210> 8383

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8383

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tccaaaatag agctcttggt ggattctggt cataaaattc tttttaagc ttgttaagat 120
cttataaaat aagaaagttt tcccaatact ttagaaaaat tactaatcat taataagtcg 180
atttataact caaagtaatg gcctaacatt ttgaaagatg aaacaacgct cctcttttga 240
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tgcaaattcg atgaagcaca gaatacaggg gaactgatct gattctgata aaagatacat 420
tactctcaga aaggggtgaa gcttaaaatc ttgcagttct tgggcaagga aggagtgcc 480
ccaggcaggc accaaccggc ttgaaaggaa aagcttgagt gaattcaagg tctattggga 540
gang 544
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<210> 8384

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8384

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acttcctttt cagaaaggag cttccgatat tcttctgtat ctggatcttt ctgttgactt 180
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tctaactcca gtttcctcac ctttgcttgc atttgctgna gatcctgntc tagtctctcc 360
ttctcttctc ttagcatttt attggntccc ataactacat tcaactggtc aggtttcttc 420
atcagntctt catgctgagc cattggtttt gcaggtaacct naacatttca aataaatntc 480
cttccaacat ntaccaatag gtgnaagcta cccggtccta tgagctcaaa nctc 534
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<210> 8385

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8385

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gaaatgttat gcagtcattt tttaaatgag gtaaatttcc atgtattaat gcaagaggag   60
gtccagaata caatgcaaag tgaaaaaagt tgcaaaacag tacatataat atcccatttc  120
atttaaaaaa aacctatata caaatgtgtg ggtattcata tatgtatata tgtgtatatt  180
aatatataaa cacaaacaga acaacatctg ggaagacaca caccaaatta agttattctt  240
ggagaatggg agtggtgaga gggactaagg aaaaatcttt cactttttac ttacacatt  300
tatgttttgc ttgaattttg ttggctaaca ttaataattt ttgaattttt atcacaataa  360
aacattttta caaaataggc acttttgtaa tcagatcaat agagttataa tgnatgtgtt  420
ttaaataaaa atagctccat gggggctggg ccgtantggc tcacacctgn aatcaatccc  480
aacactttng gaagncnaag gnggccaaat atccggcaag ganttgagaa cagctggcca  540
a                                                                                   541

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<210> 8386

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8386

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gataaacggg gaatatttgg ccatggaaaa aaatgaaata taggttgagc attcctaadc  120
cccaaatcca aaatactaca aaatccaaac tttttgagta taatgatgcc acaagtgaaa  180
aatcaacat acaaatactt aatacaaact ttgtctcatg cacaaaattg ttaaaaatat  240
tgtataaaat taccttcagg ctatgtgtat aagatgtata tgaaacaagt gaattttgtg  300
gttagactct ggggtccatc tggaagacat ctcatatgt aaatgcaaat attccaaaat  360

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ttgaaaacat ctgaaatcca aaacacttct ggtctcaagc attttgggta agggaaatact 420  
 taacgtaaac ggacacaagc tacaatatgg atggactttt ggtggtaatg gtttttgaga 480  
 cagggttgt ctgtcccca ggttgaaatg caangnnca acatggntac cgtgccn 537

<210> 8387

<211> 501

<212> DNA

<213> Homo sapiens

<400> 8387

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 tagatcattc ccatctcacg ctgctttaga ggtcagttca caccttctgt gttcagatga 180  
 gcggttgaa ttctgaacac tgccgtcttc cagccctaac gctgggcgct ggtccctctc 240  
 tcctaagccc acggctgggc ttccctgtg ccagggtca tggcggactt naagccaggc 300  
 cggctgccc gaatcacact cagggttttt ggacgctcaa gtccacagat gctgaggtgc 360  
 ccagacgagg gtgagcagg agacacatgc ctcgagaaac gtgcccaggc tggccaggcg 420  
 gctgcnggaa gcttcttacg ggcanaggaa aacntcttgn gccttnccta tcgatctcca 480  
 gccntgaagg gcaacttcng g 501

<210> 8388

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8388

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 agcctcccaa gtagctggga ttataggcat gtgctaccac acctggctag tttttgtatt 180

tctagtagag atggggtttc accatgttgg ccaggctggt ctgcaactcc tgacctcagg 240  
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 acccaggtct ccccatcttg atgccttctc ttgccccaca ccatacagct ctgcctggag 360  
 cctggaggct ggggtccagag tggctcctgg ctccccactc tnaacaccag gaattcacca 420  
 gcccaggagg ctgataagtc tgggaaaact tctggggccc ggctnttttt aagattncat 480  
 ctgctgggccc aatgggggnt ttggccactg gagcccgttc ttgccccgn attgccac 538

<210> 8389

<211> 467

<212> DNA

<213> Homo sapiens

<400> 8389

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 tagtaaaaaa caacatggct tggtaaattt agctcttttt cttgacattg gcaatgataa 180  
 tacaatgcct gtggtgtata attgtcatgg ctgacttata aatccctaca gatatgtggt 240  
 tacttctcta ctttcccttt ctttggcttg ggcaactgcc acgttgatgc actggagcca 300  
 ttctgctgca ttcttctcat ccttggcctt aaagacatag gttttattgn ctgtgaagat 360  
 ttcgaaagcc ccnnggagaa aacggccctg cgtttcttgg gcacaagcct tnacactctg 420  
 gcttttgctg agtctattgg gcancntcan gncatcttt agacttt 467

<210> 8390

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8390

aacacgcaca tattgtttta taattcatga tgcaaagaat gctacagagt gaaatcagga 60



tttgaaaga ggtaatcaaa aaccaaaggt taaaagtggc tcatataact tgaaaatttt 120  
tagatcaaag gaatgccact ttgaaaaagt tttacgggtca gctgttaatg aaatgactta 180  
catttttggga aggactccta ttcggtatgt agtctgacct cgcctactcg agtagttccc 240  
tctagtatcc ttgccagtct ttggcttcta agatctgaga atttctgggg atggggagtt 300  
cgagtcacaa tattaagaac tagtttgaag ccagctccag ggtagtctgt ctttaagtct 360  
ccactactcc gctccaaggt gactcataag gtcgggtccgt caactctgca ttatatggcc 420  
tcaacaacga aattaaaaca catactttaa cctccanan cttcttttg caggccaata 480  
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<210> 8391

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8391

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aaagaaaatc tgaaagttaa attacaaaa cacttataca gaaaacttgg catttcaaca 120  
gttccaaaca catgtacaca agtttttctt aaaatcagtc agaaataaaa taccttgtct 180  
ccctttcttc agctgcttct tgtattttta ttaaaaagaa acaaagaaat ctgtaacact 240  
gaataggcaa caacttattt cttgagaaca taaaagtaca gtaatatcta caggtgtact 300  
gggaaacatg agttaggtat tgtgctagcc tgtaacttca ttactgcct cctcactgag 360  
cacagaggag agaggaggtg gcacagacct ggtctataga tactgacagt tttgnggcat 420  
ctgaatccca gccaccagaa gcaggtgagt agctactggg gaaagacagc ntttcagaag 480  
ccagctggct aatttgggga aaatggattc ttcctggang gcttttttga aaatttatgc 540  
c 541

<210> 8392

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8392

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gttttttttt tttttttttt ttttttaaac cattactgng actttattat aatagttaac 60
aatatttttag nggtatacaa tcatatcaca attactcaag ctatatacaa acaggtatTT 120
atataagtct acattttaaaa aagaaaaagc aattaatgac ctccccaaaa tcacattatc 180
atcaacaaga ttttttttcta aaagttacgg ccaatccaat aacaaaaaaa ttcacagtta 240
ttctgcagac atttttaaga tgcaggaatt gnattgcaca ttatataatt ataaaccata 300
acaagcagtt atatatTTTT atctagTTTT tcacaaaatt tacattatca tgcaatactt 360
cactgtcaca gaatgatgga actagaacag gttacttac aaactTTTaa ttatagccac 420
aaatttagaa ttatttttaa gntatatTtc aaattattat actaaaaaaa cacttcaggg 480
taataaaacn ggcccccatc atnatttggg tcacagatca aaatactttt ttagggggcc 540
tccttgggct ttgcct 556
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<210> 8393

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8393

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gttttttttt tttttttgat attcaagcat gttcttttat taagcatagg atgcgaggca 60
cagcaggagg ttttaagtaca atgngaaagc aagagaactg agactgtgat tgacagacaa 120
agggattaac taacgtttta ttctctgccc cccaaaatat cctgtgtatt cttaagtata 180
tacgcttccc ttctgcctt tcaaggtatc taaggaatga ttgaaaaat ttgttataat 240
ctctaaagaa ttttttgcat agcattagca aaggagtcta tgacaagtac tttgccacct 300
ggtagttctg cgtattctac tccctctggg tgtcactgtc atcctcactg gctgggacaa 360
ggttctgaga tttgtctccc cagcagttgc taagctggct cagtcttggc caggatgaat 420
gaaacaatta tctcctggat caatgcaaca aggagcatga acctttgctt tttctttcct 480
aagtnggaaa aaggcacccc ccgnttcaat ggtggncctg gtggaactgg attggaacaa 540
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g

541

<210> 8394

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8394

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tcaccaaaga gaccagaagt aattaaagag gtatatattac agtagcacat cacagtaaac 120
ggaaaacat tcacagattc aacattgata ctgtttttgt gcttggttac acactgaagg 180
tgaaggatat tactccattt tggatgaact gaatttttaa caaatacctc aatcattaat 240
aaatgctatt ttcacagtc agtatcatca ttaaattctt cagctgctgc gcctgtgtgc 300
tgaatcactc catttctttc tctttgaaca tcatcatcac aatctgtact gtcattcttcg 360
ttcaattccc tgtcagattc agcagcagct tctcttacag cttcctctgg agtttcattg 420
ggtggaataa atccattggg ggtagatcat ttgaattatc cctggatata atcttcgatg 480
natactttct gatggcccat gggcaagtat ctttgaatgg tcaggcnttt tcgaaggcaa 540
gtgcnttg 548
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<210> 8395

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8395

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gacaggagga aaaaaaattt aataatatat gtttgcacag gagttccacg aaatatgaga 60
ctccaagaag ggtcagatga ttgacactca tacaccatcg tgagctatcg aaaagaacgg 120
cagtttgga gttctgcagg gagttgacca cagaagtggg agagtgaagg gaagaagtgt 180
gtcgtgaata aagcttggct ggttttcaga taaaaggctt tgcgagtggc caggtgtggt 240
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ggctcactcc tgtcacgtcc cagcactttg ggaggccaag gcgggcggct catgaggtca 300  
 ggagttcgag accagcctgg ccaacatagt gaaaccccggt ctctactaaa aatgcaaaaa 360  
 attagctggg catggtggca ggcactgtaa tcccagctac ttgggaggct gagacagggg 420  
 aatcacttgn atncggaagc aaaggttcat gagcttaaaa ccgcccntgc atttccatnc 480  
 ccggtgactg tgnagactc ctttaaaaaa aaacggngga aaaaggtntt tgagt 535

<210> 8396

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8396

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 tacagtgac cgccaccacg cctggctaatt tttttgtat ttttagtaga gacggggttt 180  
 cactgtgtta gccaggatgg tctcaatctc ctgaccttgt gatccaccag cctcggcctc 240  
 ccaaagtgtt gggactacag gcatgagcca ccgtgccag aatgttctgt tttgtttgt 300  
 ttgtttgttt gttttttgag acagggtctc gctctgtcac tcaggctgga gtgcagtgg 360  
 gcaatcacgg ctactgcag ccttgacctc ccaggctcac atgatcctcc acgacagcct 420  
 ctggagtgtc cctncacttt ctttcttaag ggcccctnaa ggacatgtca aaaggcctga 480  
 gactacttgg ggggaagtct atgggcaagc aggcttgcca naactgaact tgncccttgcc 540  
 ctgg 544

<210> 8397

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8397

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 agcccctctg ctccacccat gcccccatg atggcacatc tgtatgaggc tgaggcatgg 180  
 ggggcagtgt gaagaacagg ggcaggttcc aagaaaaaga agaaaaaccc tccccacagc 240  
 cctaataaat aacagaaggg tttgggatga cctgggcaca ggcaagggga gacacagcac 300  
 cctgaacccc aaaacctctg aagtggggca agccctactt aagtagggga ttaggagaaa 360  
 gtgggtgana ggtgganagg cccgacacag ggaggggctt anaggaaaan ggggtcccaa 420  
 nggcccttgc catgggggaa ccttgccccc anctacagct tggctccttg attcttagag 480  
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<210> 8398.

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8398

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 atggacacca tgctgntgct gccaacacc gtgatgcccc gcgcctggng ccgggcgtgc 180  
 gtctctgcgt accacgtatg catggccacc gagtcgaaag tggggatcag ggtcacctgc 240  
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 agaactcctc atccaccang tgggcgctgc tcccgctggg caagtaggcc aaggttccaa 420  
 ttagaccgn gacttgntg gggttggctg aaaaccnng gccggctgct ggcttaccac 480  
 ctacgggcct tgantggcaa gtctttgggg gtttaaggact ttnttgaaa aggggttccc 540  
 cggcttttct 550

<210> 8399

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8399

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gaaaatgtta aaggaaagct ttcaatacac caactgaaaa aggcatctct aattggccaa  180
ccaaattatt ctttttagatt attttagcca aataaaaaga aatttacaga tggataactg  240
aggtccacta acataaggta gaaacaaagt ttaagctaaa aattaaatct atattttgtt  300
gcagataaat gtgagattta cctacagcaa ttttctattg atgctaaatt aaaagcatga  360
attgacatcg tctaacagaa atggtttgac agatatattc ttggctttaa aatgttctta  420
cgcatatgca tagaaatgcc atganggata agaataatct tctggattgg ctgtncagtc  480
ataaggcctt tgncaattgg agtaccttcn atggngaata tcagtagggc cattaaatta  540
a                                                                                   541

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<210> 8400

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8400

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aacaagaatg cagatgccat ttatttggtc cataagtata gtcgttattt gagttttaca   60
aaacatcgaa tataaataac ctgaaactgt aacaatacac aaaaattggc ttcttacaca  120
gacataccag gcggtacaaa ctgaaaactt gagtaaatta acattgtttt acattaatat  180
acatagtgcc atctaacatt taaaaacaag tttcaatgca tagcactcga tacttctttg  240
aatctgtttc aatcagttaa gagtatgaaa atggttagat ctaggctaaa aataattctt  300
cttctagcca aaaataaagg cataatattt ataaccaggt atcaacttta ctaaaccaca  360
atattttgaa actattaatg atacctagg gtattttacat taaaaggca acatgcattg  420
ngttggttta tctcatgact gggatatcac acacttggtc aaagggtttt taaaactata  480

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ttctactttc aatccgcacg ctgcatgggg ctaacagtct agcaaaatga ag 532

<210> 8401

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8401

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gaaagtcctg aaaacaactg actaggtcta aaaaagagaa aaagatcttc aatcttggga 120  
tgcgttgcca acacaacatg acagtagatg tcacacttag gtttgcaaaa aatataagca 180  
tttggggttc atttcagtat tggctctaatt taaataaatg tgaaacgagc cttaaaaatg 240  
tactttccag tacttttggg atttttcata aatattttaga taaaaaagaa agacaattca 300  
tctccttttag acagacagtt cagggttaaga ctgtccataa ttttaactat ccctttccctc 360  
ccaagtcaca tttttgtag gactaaatat atcatactct tggcagttcc cttgcttggc 420  
tttctcccca ttctgagttt tgaattttct gcatgactgg attcacctc caacttttgg 480  
aaaaataaaa gtttctcact attnaaanaa ggngnattga aatgggatch ctcaaa 536

<210> 8402

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8402

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aaaacaaca aagaagtagt cacagtacta acatttaaaa cccagaggag gaactcacat 120  
gttggtgttt cagttttgac agacctacta ggatgaacta tcctgagagg gctgttgcag 180  
agggtgttga tttcagcaag gcatttgaaa tcgttagatt tttttttaa ggataaagca 240  
gaaataaatt taaattcatg ggcacctaag gaagatgtat ttggacctct gtgctgttct 300

ttggtgtgcc agaagcagtt ctatcacttc ctcactgtag ttgaagagtg gattcagtg 360  
 tatcccacag aactcacgtg aaactgggca gtacacaaga gcaggtgttt tggacgtgtc 420  
 tcatcatagc tgctttaaga ggaaaaatga taatnaatgc ctgtattncc tgcccatgta 480  
 tttttggtgc tnaaaatggt ttttnaaaat ggcttttcct ggggaancta gtgaagtnt 540  
 ccc 543

<210> 8403

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8403

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 tgcacttagt gcttgaccag gccttgagga gagatacagt accgcttcca gagcgccaga 180  
 ggggccagga cttgaggact tcgtgagggg actcctgcct atctttccct gccttgatcg 240  
 tgtgggacag gccttgaggg gtggtttgca ggaaaggagt tggctctgggc ctcccagtta 300  
 aaaccaggag ggtcccaaga gatccctcga agaaggcaag gatgggatct aagattgcag 360  
 gccactgtt agccccctgtg gtgcctttgt gcgaacagga aaatgacgcc ccttctcaag 420  
 atgcagaaaa ttgnnataaa tataccaggt tnggtgaaaa gtgngggctt ccttggacaa 480  
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<210> 8404

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8404

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 ggtttacata tgcaagtaaa ttggacatac aaacacttag attccacctc taccaaatac 180  
 cttgattaat gcaaagagga gggggaatac tgacacagga aacctgcccc gaaactagac 240  
 tggcagagat gtcagggttaa caaactgcta aaagttacat ctccaaaaag gcacttatca 300  
 ttgttataaa agtgcttaaa atctaaactt gaacctgttg cctggtttat aaatttacia 360  
 gaaactgcaa agaaccacag actagttttt aatatcaagt ttccatacaa aattgtccaa 420  
 gaatttattt gcaatacctt acatgtgaac tgaaataaac ttgcaaact caattatact 480  
 aaagtttattc tggaaattca atcancttac tcataactca gatgcttttc ttcattnt 538

<210> 8405

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8405

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 gtttgttgaa ataaatatgg aaataaggct gagcaagaca gccaagccag ccaaactgaa 180  
 ataaattcat cactcatggg ctctcaaggg atggaaaccg tgcatttttt tctaaatgat 240  
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 tgattataaa tgacctgcag agagacaagg agatagtgga tatgaagggg agatggtggc 360  
 atggangcga ggggaagcag ctgctgtgga ggctgcagct gctggtggcc agcantgggg 420  
 attactatcc aaaagcaact ntctctgctt ttctgacccc acantaagcc ctgagaagaa 480  
 cctataatta ttctgggnga attcaatgan tggaaanggg tcaaaagccc cccaagatt 540  
 naaaant 547

<210> 8406

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8406

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aaagaggcca gttcaacatg gcctctaccc tggtagaaac aaaaagtga aagagaagaa 180
aacagaaatc aactaagagg tgttgccagt gtctctcagg agtggggccc tggctgttgc 240
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cacatcttcc tcaccccggc acatccacat cccaacttag gtgtcatgga aatctttcag 360
cagggttctc ctccgctgct ccgctatatg catctggttc tccaagtccc ctctgtcata 420
actgtctgca cgctccactt ttcattgagan ggtttcgatc ttagcctccn ctgacctgct 480
nggatttnaa caagnTTTTT cttgggtccg gactcctgga atatgcctat ggggaggggg 540
t 541
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<210> 8407

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8407

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atacagctca atctgtaagt gtccaagatc cagggggcag gttctcaagc aggaagcctc 180
aggcactctg gctctgtggg gacctccctt gggcatctgc ttgagaatct ggggaaggga 240
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gcctgggtccc tgtgctcttg accttcattt caaggtcaag gagagggcac ttgacccaac 360
tctgccagcg aggcaaagta atggtgattc aagtagtgng gttcaggagg gaaggtangg 420
ggcanaccag aatgagtgcc cttaaaaagt cctgggcaat gtctgctggg gcccaagcaa 480
tgggcccagc ntntnaaagg ggttggnana agggttgaa ccnccnnttg a 531
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<210> 8408

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8408

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cctcattatg tatatatgca aatattccaa agtctgaaaa aatccaaaat ctgtaacact  180
cctgtcccaa gcatttcaga taagaaacgc ttagcctgtc ttgggaaaca gcagccactg  240
gatggaaagg ggcagccagt agcagaggcc tcagcccctg ccttcacctt gagaatcttc  300
tgtaacaaaa gctgccagct ttcagggaag aaaaagaatt ctgtggcctt gacttaagcc  360
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cttcatggca aagcaacagg agaacctgga nanggtcaat tcgggggcca gcagaaccag  480
gctgggttgg aaggcttgct actggaagca aagtggccca cattctanaa agagacatca  540
gggggncc                                     547
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<210> 8409

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8409

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catcccaacc aatattttatc catatgaaca gataaactga acaaaaacat agttctgata   60
aaacctgcat tcacaaccta atgtagttta aagtaaattt tttcacaatt gagggctgct  120
atttaggact gttttgttaa taataaaaac aggaattata tagaagataa aacaccattt  180
tttactgcta tataatgtct tgctatataa aacataccct caacaagtca aaatatttaa  240
aaccagtgtt tcaaatacca aaaatcacag ctatgttact gttcagtaac tccactcaaa  300
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taaatgtag tactgcattc ttgaaggaaa aaaactgcag ccaaggcaag aactctgaag 360  
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 ttcaataact ccagcctgnc acattttact tcaattggnn aaagcactct gntgagaatt 480  
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 ana 543

<210> 8410

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8410

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 ctccagcctg gaaaacctgc cctcccatcc cccttagcgc cttcttgccc ttccggcctg 180  
 attttcttcg acagcagttc tggccagggc aaggagctgt ggtgggggca gtataagcca 240  
 gggactccct tcccacagat gaggcctagg gctgcaaaag ggccccgtga agaaaggaga 300  
 aggtgacagg gatccttctc ctcccatat ggagtgatgt ggtcaaggct ttatgggtct 360  
 ctccacctca aagagaaagt gccctagggt agtgtcctct gaanaggggc cacgcctatc 420  
 tgcaaagggc ctctctggga ccaaagcang gcaatcttcc ttcttctgna acccaanggc 480  
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<210> 8411

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8411

cagtttagaa agttttatttt cccagggtta aggtgtgccc atgacacagc ctcaggaggt 60

cctcaccaca tgtgcccaag gtggttgggg cacagcttgg tttacacat tttagagaga 120  
 catgagacat caatcagtat gtgtaagggtg tacattgggtc ttgaaaggca ggacaacttg 180  
 aagaggggca ggggcttcaa gcataggcag gtaagagaga aagggttgca tttttttgag 240  
 tttctgatta gcctttcact gaatatacaa tttacatgtg agaggagagt agaggaatag 300  
 tcagttatac cttaatctgg cttagtgaag catgaaacag agaaagcaat catttatgca 360  
 tttgtttcat gtgaagactt tgagttcttt gtccataagg aattcccttg tgagcaaatt 420  
 ttatctttgt ggctggctta tttaggaata aaatgggang caggttgncat caatcaagtt 480  
 cccacttggc ttcctttggc ttaaagggtt tgaaantttt cnttcatatt aacctaggnt 540  
 aaaaat 546

<210> 8412

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8412

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 cccgggtctt tagatcgtca tcttggagtc cggttccatg ttctcaccgc tcttccatga 180  
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 actcaatccc catcaccaca gccagcaaag cctnctcag gggccctgcc tcttcacctg 360  
 ctgccttcac aagccccacc agggccagac cccgcttncat cgggcactgn tctgacccca 420  
 gtgtcancgg gcacagtggg caaccagccc ggggccggcc aagcggaaca ccttaaccac 480  
 tgacttccgg gcaaccctgg ggtccaagtg gatnctgncc aacggctttt tcaagttctt 540  
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<210> 8413

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8413

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cctcttccct acataatagc aaataactaa cgtatatgaa gcattgggtac actattttta 180
atgcaaaatt tcttaaactt tgattcctat atagtaaaat ctataaaagc aagaaaaatc 240
aaaattatca gtttaaatgga caataaggac agttgaagta tgtgtcttca agttcgagtt 300
aagccattaa attttttaaa gtaaataactt aaaggtaa at tttatataaa tatgtcaaaa 360
tgtagatcta tttatcttagc actttgntca ctacagataaa tttatattgc atatcta atg 420
agatatgcca tcatcttcca aggattatac ctctattaat caaaccaaac caaacaaccc 480
ttttaaaggt antcactntt tgaaaccga angggacat ttcacatgn aattggttta 540
ccttt 545
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<210> 8414

<211> 516

<212> DNA

<213> Homo sapiens

<400> 8414

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gcaacctctg ccttcccagg ttcaagcat tctctgcct tggcctcctg aatagctggg 120
attacaggct cccgccacca caccggcta atttttttt cgtattttta gtagatacgg 180
ggtttcacca tgttgccag gctggtctca aactcctgac ctgctgatcc accgcctcg 240
gcctccaaa gtgctgggat tgcaggcgtg agccaccacg cccggctagc acttcccttt 300
ttaagctagt gctggcatgc caccttcccc tcaaagcaga gtcaacttcc ttttgtttga 360
gagttttgta ctggcctctg taggccttt tcaggataca aaataaagt cccttcagca 420
tccacatgcc antgggttgc ctccagtgt caaaactggg gtccanantt tgggcaatgc 480
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atntttccaa gaattaaacc ncatggctac acncnc

516

<210> 8415

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8415

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taaaatggca cattttaaat acatatatat aaaattttta caaatcaagt gtgaaacaaa 180  
agcactgcag tagctaaaat gggaagaaaa aaagaaaaca agcttcaatg gaaataataa 240  
ctaactttag aaaatgaaaa gcaaaaaaat atatatataa attcacctag acttaagaaa 300  
catcgaaatc tggaaatcag caactaagta agctctggaa atagactgca cattaataag 360  
cacctttact tatgtgctct gaaatcatag cagcaagctg gtgtcagaat aataaccttg 420  
agattacnaa gtgtacatat gggccattaa agctgttttt ggaataaaca ttttncagaa 480  
gtgataaaat gatgctctgt ganccaaagc nttcnactn tggaatttca tagattttaa 540  
tttn 544

<210> 8416

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8416

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tttcataatc ttaacctccg acgatatgat tatacttggt taaaaagaac attatatcca 180  
gatataaact taacaaatga aatattacaa aatatgaaca tagatagttt tgtttcccat 240

tataattccc agcattttca ccctgtcctg ttcatacgag tcaattctct tcttcaattc 300  
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 cagtctcgca ctggctcanc ctcccccttc agcgacacca tttccctacc aggggtacaag 420  
 ctgtttcctg ggctctaagt ggagtctgat ttggcattcg gtcccatcct agngctcttt 480  
 aagctnggac cctgaatcac agaaccctt tgcttgncta atattaccnc cgccgg 536

<210> 8417

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8417

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 atgattatga tctaattcaa gccaatcttc tcaagtccat ttcccagcca tacttttaggc 180  
 tacagaaggg atcccaggag acaaaagtgg aatgaataag aaacaaacat cttttgcctc 240  
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 cacaacttca caatactaaa acaaatacaa ataagaaagg gttaggtagt tgggcttcat 420  
 ttactttttt ctttttcttt ttttttttaa tatctcaaaa aggaagccac tttgcttgat 480  
 atcaaaatgc tgtggaaaga aaggagggga aaaaaccccc aatttaatgt ggaatctagt 540  
 tattttcc 548

<210> 8418

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8418



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 atttactnac aaaatntaga aaacaagaat ttacctcttt taaatggcat gtctgnatta 180  
 cttacaattt gntaaatgag ttcctttcca tacatacctt aagatccaca accttggtgg 240  
 cataaataac atgattaaag ggtcaggtac aatgtatatt ttaatatggg atttgtgtan 300  
 tgatttagag cataaatatc acacagtga aaatttatca cancctaaat acagtnacac 360  
 aggggaanga aagagcttat gtccacattt ccaaggtctt tacaataacg ttatagcgtc 420  
 caggtccaac acagcatatn tgcatacaaa agcccactga tgtgaacact tgaaanggae 480  
 tctggcctgg aagggccttc atcttggggc aataaagttt gtnncngtc aaattanttn 540  
 caaaagacta 550

<210> 8419

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8419

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 aaagtgtgt ttcctatat tacaggtatc aaaacagagc aaaacatcca ggagaaccaa 120  
 actgaaactc agaaaagaga caatttctga ggcccaccag atcctgattc cattttgaaa 180  
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 tgggccaatt ctttaaggcac cagctgtctt gaggaggaag atgaagactg tgaatgaagg 300  
 acagcagact tgcttctagg aaaataatat atgtaagttg ggatgcctct tgcagccaga 360  
 tgtttccgaa taagtcgctc agtaccatac cagttaaaac ctttcgtggc atgtccaata 420  
 ccgtggaaga tgaacacttg ctttcttctt ttttgctgct taaaatatct tcttcaaggc 480  
 ctcttctaag gcttgcattc ttaatggcng accaggacat tgggaccatc ccnaagcttg 540  
 ancccaaan 549

<210> 8420

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8420

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ggagagtctc acttcatcac ccaggttgga atgcagtggg gcaatcttgg ctcaactgnaa   60
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aggcacgtgc caccacgcct ggctaatttt tgnatttttt gtanagacgg ggtttcaccg   180
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ggccttttaa atatatttag gttttttttt aaacaaangn tactcaaacc attacctttc   420
tggccccctt gaaaagaaaa aaaaattgnc catnccattg ncttctctaa tttggaaagt   480
ccgaaagact caanggtttt tacttccgnc cttcctgcna nggg                       524

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<210> 8421

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8421

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ctctaccag caccatagtg aggtgggctg aggggtaacc cccaaggac aatcggaggg   180
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ttgaagtttt gaccctttc ctagggaaac taaatgccaa tgagcctang aaactnaatc   480

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ttcttttcaa ggcctttcct ttgngacca aanttcngac ttaacttttc ccagcttntt 540  
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<210> 8422

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8422

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ttaacctact tatcaagaag ggaacttcat aagtnataag aattctaccc atataggaag 180  
gaaaaaggag acagctaata gcatagtcac agatacaaca tgagtccaag caagcatcaa 240  
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ctatagctca gggtttcata gaatagtatc atttgaccaa cacagtgtgg tgganggaga 420  
ggggtgaagg aaacacaaat nnaaggatag agtttggacn agaaaaatcc aatttcccct 480  
attnccttct aaatactctt catttgggtcc aagcttttgg gctattcagn aaatggcaan 540  
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<210> 8423

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8423

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acaatgtaaa aagaatttgc tctgcaaccc tgtggggggg ggaaataaaa gtaacccagc 180

gtccatttaa tgcagccaag tgcaattcct ttccccacct tagaaagcac caccagataa 240  
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 accacattcc cattttgttt gctggataat ttttaataaa gtgaggttta catcactgat 360  
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 ttagagaaag catgagaaac agggagcatg tggggtgaag gccgggcaag aattgnaagg 480  
 ttgaggcncc ccagnttant tccttgctgn ggaagaccat gcctccgac anggggtttn 540  
 atgct 545

<210> 8424

<211> 515

<212> DNA

<213> Homo sapiens

<400> 8424

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 ggttcctggt ggttcagctg aatcctagac agtttccctt ctctcataa agctgagaag 180  
 aaaaaaaaaat tatctccatc taggcccacg ggaattttgt gcatagacag tttgaattgg 240  
 tctgaaaagt gtgactagct acctacctat tcacaatgcc tagaaaatgg gctaccagat 300  
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 ccttggcaag gcccctaata ggtcccgtcc agcaaaagt atgctcgtgt ccctcggtg 420  
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<210> 8425

<211> 474

<212> DNA

<213> Homo sapiens

<400> 8425

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cctgcacccc aacacggtcg gattccagga cgccagtgc aaaaccagt catggacaag 180
cagcttccat gcgtgtgcat ttgattttta aaaacaatac atatttcagt gttaacttcc 240
cccctcacct ggcttgaaac attttcccca ttttccaggg aaacaaactc taccaaaaagg 300
tgccgcctgc aggaccccgg gccagcccc ttctggaggt ggtgctgtgt ggactcctct 360
ggggcggacc cggggccagc acagggcccc tttccaggcc gccttcaa at gcagctttgn 420
cactgccgna tctgntgntt aaaaaatcag ntttatgttt aanggcgggn aagg 474

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<210> 8426

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8426

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aaacactgca aatagccaag tacagtactt tggtaaataa aaaataaaat ggttcagatg 180
aacacaatcc gtggaaagaa acaatctagg gggaaggaaac tatggacatc agacaatggt 240
cacaattctc accatcgagc tccatagata aggcaagact tgctaagtct atggatcacg 300
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aagagagaag gccctctctc cacggataca tccaccctc tgtaaaggag actgacgc at 420
gccaacactt ntacatggga aaggggagcc cccggtgtga cgtctggctc ctggnccitt 480
cttctttcct ctgagcttaa tgctggtgga ggctttggna aaagcactgg ggaaggncca 540
aggncnttn 550

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<210> 8427

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8427

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agcagttcac ttcaatggct ggaaactaga cagaaagttg ggaatagtct gactattatc 60
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aataaggggc tgtggagggt gatattatta atagtgttat gcagaaaata tgaatggcag 180
ggaggggcag agagaaaaat ccatttcttc atttaaatca aattttaaaa atcttgaacc 240
ttagaatcta aaacttacag taatttaaaa ccaaccaaaa tcacatccta atttttctga 300
gccctttctt ttcatgaaaa attacatatt ataaaacaga agtttggggg gaaaaaatct 360
atgttttacc atacaataag ttgacaaaaa ctgganaaac tagaacaac aaatccaact 420
atgtagtctg aaaacaacaa ggaaaatggc ttattcatta aaacngttta accattcntt 480
taacctggat gancngactt gctggcttta aaancccaac ttggggatta ccaaaaattn 540
ccgttnt 547

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<210> 8428

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8428

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acaatagaaa ctgttttttt atcttgactg ccagagacgc tcctttgcaa tgccttccgg 60
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gaggcattgg ggtcaagtcc agaggggctg gtctccacaa atttgaaga gtagtggggg 180
gaaacagggc tcagggggct ggtggcggca ctgtatgtta tgctgggcat gacggccatg 240
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tgggcaatct cgagctgccg ctttgcacg cccagtgcgg agaacaggtc cagcttgatt 360
atcgtctctg cacttaagct gttctccagg tgctgtgttt tgtcttgcac ggctgaaagg 420
gctgacatta acacctcagt gtccttctca ttttccttat atttccgaac ttctggactt 480

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ttaagtctaa gttctctgat ttggncttct ttcaccttca tgntccatcg ggagcttttt 540  
ggcctttggg ttctaagtct t 561

<210> 8429

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8429

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tttgtggatt ttgatgccac agtgtaaag agagggtttc acacagaaac actctggggg 120  
ccttcggtga caaaagggt aggcctctgg tggggagggg gtggcaaaag gtgaagtga 180  
attaggagag atgtggggag cagaccagg gctgggagac tgctccttc ccatcacaca 240  
tgcccatcaa ggaccccaag aggaaggat tcttcctgcc atggcctggg ctgtccaagt 300  
gagcctgact tcccttccaa ggcagctgcc tctagcttca tgtccaattc tcgtgagta 360  
gatgaggtcc agggtaggcc cacagttgac caccaaatgg tgaananata taagccaagg 420  
gagaaagaaa gtgggtttgg aacccccaat cattctccat tttcatccta agctccttaa 480  
aactagttca naacttgggg aaagacngca cncagttcta tcctttcggc anactgnntt 540  
tcctgcctct gggganggg 559

<210> 8430

<211> 388

<212> DNA

<213> Homo sapiens

<400> 8430

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agcatgagcg attttagaag catagagaca aaggcacttt caccttgcat tttagatatt 120  
tgacaaaaac ttgaaatcag acatattcat agcagtacag aaaaccaatg actaattgtt 180

cacataatca gcatcctata tcctacaaaa tgtagcttc agatattaga acatttgaat 240  
 gtctgaaaaa agaaacagat ctaagcatgc agttgtcctc cctgcatttt cagagtgca 300  
 caggaaacac attgncacta gctattatca tttgctgngc tgtatgaaag agactnggng 360  
 cacctgggng naaacagcag gcanctgg 388

<210> 8431

<211> 485

<212> DNA

<213> Homo sapiens

<400> 8431

gcaaaatgaa acaagtttat tttctccaat aacttctgta aattacaaag acaaantact 60  
 aaaaactaca gcatataact tttcaatatt taaccagagt actcgtaata aatatgcatc 120  
 cggaacaag ataaaaggct acacctcgtc aggcatccta caaaatgtc tcaagtttta 180  
 tatactctgc ancatttntg tgcgggggca naaggggctg ttgtgtattt tctgaagtgc 240  
 tgtgacaaaa ggtcctttca ctttctttg gagcnttttt gaaattgctt aactataatt 300  
 aaacaactta agaaaagtaa caccaagctt taaagccatt tttgctttgc tgn cattggt 360  
 ccttatccaa tacagatcaa catatcatcc agcacagcca agcacccnct gangccaanc 420  
 agccttntgg gacatgggcc ctgtcananc atgccctact tttagttaaa tacttttgna 480  
 agagt 485

<210> 8432

<211> 505

<212> DNA

<213> Homo sapiens

<400> 8432

aaaggaaatg cattttatcc cactgcacat tgcaaaagtc tcacgcaaaa aaagctagac 60  
 tttcctctat gtatggcatc aaaaggaggt aaaaaatgat tggatcaccc agattataaa 120



taaggttatt tgtttctcaa aaatccttat taaaacatta aatatacagct cttttggggg 180  
 agaaatacat tcatttcagg gagacctcgg aagagtgacc atccttttgc tctaccccaa 240  
 ccaggtgggg gaggggaagc cccagagggc ccaaggggtc ccctccagtt gagccaggta 300  
 gccactcaca tcctgccact gaaggaggtg gctaatacac aatttacaaa tgaaactgca 360  
 cgtccattaa attaaaccca atggaaaaca cacgtgtgac ctgtcctgtc attcacagnc 420  
 atgggggtgag aggggaacccg aggaaaaggg tgcccaccca nggggtcttg gaangtgggt 480  
 gggaaggtnt gtgttanggn ggnca 505

<210> 8433

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8433

aacatcttta ctttttaatg aaaaagtaga taatctatit gaaaagtaca aactcaattg 60  
 caatttcaag aaaaaaatat gtatttatat accataaata agcaaaattg gactctgaag 120  
 ccctaatact tcaaaagcat tcatactatt ccataaaaac ctagtattat tcagcaacag 180  
 tactactact gattttaaaaa tagaaagcaa gtctatcttc acatgtagtt ctttgtcttt 240  
 aatttgtaga actcaccaag gttattttca ttcttagcac ccgggggttca ccagggtgtg 300  
 atccaaagca aaccagcata ggtttttaac agaaaatctt tgccaggaac ttcatgacct 360  
 gtattttcct cacctaggaa gaagctgtcc ccactcgcac gattttgaac agtgtgttga 420  
 tgttattgct tcgaattgca tcccgacaag cagtgatcac ctggttcttt tggttttcca 480  
 accgcagac gaactgctct ttgaattgct tggattactg ntttganggt tnccaacang 540  
 ttttgggg 548

<210> 8434

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8434

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cttcattaac cctttattac aagtcacgct cttatagaag tatatgtgga cttacgtgaa 60
aaaatcaaat gtatccaaga ataaaaaaca cagcacataa agtagtatat gcattccagt 120
gttcgcgcca gagacggcgg gcgccaagt aaaagctctt ctaaacggc ctgactgggg 180
caggccgggt gcgaacggtt ccgggcctca ggcacagtgt ggggccgcct gcctcctccg 240
cgccccggcg ggcgggggca gcaccagctc ctagggcctc cgggccagcg gcggaccca 300
ggccggccca agcccgacgc caggcagaac cttttgggcg gggccgtatc tggccctccg 360
gggacggcag tgacgacacc cccagaaatg tgggcttagg gctggccaca gggtagcctc 420
agaagcccg c aagcttaatc gggctttttt aaggaagatc tcgctcagaa tcaccacac 480
aggggaagtc cgtctggatc gaaaaggcca atgctttcca aagggccnaa ggctggggtc 540
caccttttc 550
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<210> 8435

<211> 179

<212> DNA

<213> Homo sapiens

<400> 8435

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aattatacag atattttaat tgtatatata tcaggtacac ggaataaaag tcctactctc 60
tagaacatga gaagtcaata aatagaaaag atatacaaag tggaatgaac ataaaaatga 120
ctaagcatgt gatcttcaca ttcatacagn ntntcaacta atctttnnca atnaaaang 179
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<210> 8436

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8436

ctagtgaggg tttatitttaa tcatcagtaa aataaacagc agacgaaaaa aagattagta 60  
 attaaaacgg agtgtttcca ttctttactc ttttaagcatt atccatgcac ttctcactga 120  
 gctcacccat ttgttgaaaa aggagacaaa gccatatccc ttagactttc ctgttgccat 180  
 gtcttttacc actcggggcat ctctgaaatc agaaacaatc agaagtttag gtttgcaaac 240  
 tatcctctgg atatcaaata agaatttcac acacaactca ttctcatgtt tcaccttcat 300  
 taaagtgaac ctttaatgca aattcacctt ttattctaca aaatttatca tgtattagga 360  
 aatgaggctt aattttatag acatgcaaaf caataactta agtatatatg tatatttata 420  
 ttgtacagaa attgcctctc tcttcaaaaa acttttttaa cttttaaata ttaagcatgg 480  
 tgaaagcagc tactccatga actacttanc ctttattaag gtcncaggcc attingatgaa 540  
 agggtttctt taaccnngc 559

<210> 8437

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8437

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 ctgaagtgca tttcttaggg tcccactgta agttgagggc ttgagattcc aagaaaagtc 120  
 ttatttcaga gctcagtgtc ttgccccaaa cgcagcctca ctgctcaatc acattcttga 180  
 ggtttgattg gctgaacgca cgtggaacat caggttcatg tttccaagca agaatcatgg 240  
 gttggggaag gcaagtgttt actgtggtcc agctgaggac tgtggtgtct gaaactttgt 300  
 cacatgggag gctacaggcc cggggctggc ttggctcccg tgaaaacact gcagcgggca 360  
 gccagtccgg aaggcagcat ctggcagggc cttcaggcct tctgagtaag gaagacccca 420  
 gctttgcaa agacatagag gcagcactgt gactggactg aatagcncac ctntntaacc 480  
 ctntntcaag gcaaangggc canaanccag gtggaaatgg ggc 523

<210> 8438

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8438

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gggggaagca caagctttat tggctgaaag ttcttctcag gagcctggtc tgctgggact   60
gcatgttcct ggatgggctc cccagggcct aagctccagg tttcctctgg ccttccgaag  120
gattttgtgg gttacgacca attgatcaaa gatgactttt tcctggcgct tgctcagctg  180
caaaagcttc atggtgtttt gcaacttctt ttcttgttca aacaattttt tatgtagttt  240
ggtgacctct gccttcattt ctccaatctg ctcacagtga agggggcact ggccatcctc  300
ggggagtgag actctccaga gaagcttcag ccgcctgtag gcctcttcca ggggtcaagct  360
tggccgtgct cacactgctc acaaacttgc tcantgggtg tgggtgtgga ccctttgttc  420
ccagctcttg acttgtggaa ctgggagcct cttgggtttg aatggccatt tcancaagga  480
gccctctgtc cttgctgaac tggttgagca nggcctataa gncctaata gncaggaca  540
tgnggcatt ntnttgcc                                     559

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<210> 8439

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8439

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ctgtatatat ttcaagtga tcatthaatg tgagtgaggc tcagttagn gttaccataa   60
gtattaacag aagaaaaagg gaaagcaca acattttccc tctaccagaa aagggtctga  120
tgtaagataa actagcctgt tggtttaaca atagctcatt aaaaaggcca gagaatctgg  180
gagaagatgt acttgaagc actgtcctnt gagggcccat tccaaggga cagcaaaata  240
ctgaaaaaaaa ttaactggct caaaaattat attgagagat aaaaagagtt agtcacagct  300
tagaaaaaaaa ttccagaata aatgacacta gctagattag taattctgat gtttccttgt  360
catagtactc tgtgcgaaac agagggacta caaactgggtg cccctttgaa cagagtgggt  420
ttaaataata gattctccag tgcccaactg natttcaagt ataattctgg gatttgnacc  480

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tagaaatccc ganaaaaagc cccangggga aagggaagc tttggcctt aaaggattgg 540  
c 541

<210> 8440

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8440

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aacactatct tcaaaatagg ttttgaccc ctaaaaatga aaattcttag tgacaagctt 120  
tagatatgaa acttagccca gtgggtattc actttgtcac aaaaagcaac tacagacaaa 180  
tagtttttcc ctctccccga cacaaaaact gaaattacag acttttaaag cagaaaaaat 240  
tttctccaaa atgcaaata ttaaggtcca aggaacaaat gaacagaaga tctcaattat 300  
tcaattgagc gaggatatta gtttgcata taactccttt tcttactact tctgatatac 360  
tgattctggc aatatttata ttgnatctac tgggcaagac actgggaaca caaaggaaat 420  
tttagacaag gtccantggt atgctggtaa aggttaacaa ctagcttntt aagggaagg 480  
aggnccttac ttatagcatt ctatggggna atcctccaan tgccgcagat ttcagctngc 540  
aacaatttgg cactgngtn 559

<210> 8441

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8441

cagctttcca acccagctca tggagcttta ttcagacggg agtgacaaca tctgcttcg 60  
ttcttgctgc ccttgaagg gcaggcccta ctgagccata ttccttagaa acccaatgcc 120  
gaaggcccat gtttgacctc ccactttatt caagtcgcct aggactaggg ctggggcctt 180

cctagaagcc cccnttcana acctgttctc acccaccac cactcccgtt gtcaggccca 240  
 gggaggaccc atgaatgaca aaaatcatgt agggatatc cctggactgg gaatcccctg 300  
 ccagcttcaa ggacatatca tctgacacag ggagaagctg acatctgtca tattcttctg 360  
 cctcacgtac acacacacac acacacacac gcatacgac tcttangctt tcaagaagga 420  
 agtgatgtgg canaatgacc gntggcacgt ggtnaccact tcttggaag gatcccttga 480  
 aaaatgacct tgcccaaggg gccctnaanc atnggttgcc acaaattgnc ccatgggcca 540  
 actttttgac cctttttttt gg 562

<210> 8442

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8442

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 gcaaagtgtc tcccgaatct ttccagatgg acatttcgtt tgagtctcta gcgccctctg 180  
 gtgaaacacc atgaaattgc ccaaaaacgt aattcaggct ctgctcagga cggaagggtga 240  
 aatagcagaa tgagcgccta tttcaatgtg acaggttgtg atgtgctgcc ttctccccga 300  
 gctcaggaga aaggcagcct ctgtgagtgc ttctctctct ttagggaaag tattcttccc 360  
 atggacactc agccaagctt attgcaaaat accttcttcc taagttttca gcactactgc 420  
 cttctgaaaa aacaaaaacc ggcaatcaga caggataaat aatgaaagcc tccaatcatt 480  
 caggaccagg nccctactcc tggcaaaggt taaagggccg cnaaaatggt taaaccaggc 540  
 tgngtttcct 550

<210> 8443

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8443

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 cgttcaatct cttcatctga gattgtagcc tttgaagtag aggcatgg taagcttcga 180  
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 ggtagactt acatattttac agctagccca actatttttg atattaccag aaggcaaact 420  
 cagtgancaa actaaaaaat ccttcaaaag tcagtgaagt aaatgggtta tcctattgag 480  
 ccnttnaatc tggaataatg gtcatttcac cccaantatc ttatngcaac aggctactct 540  
 tttttaaaaa ttaatcta 560

<210> 8444

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8444

caaataaaat ataaatgat ttattccaaa gccataccca aaacatacaa tgaaatacat 60  
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 ttcccacaaa aagtctcata aaattccata aagngtcaaa tgtattttcc tgtttatata 180  
 aaatgtattc tctcttcaaa tatagccgtt ttattatgaa attgttctca atttctgaaa 240  
 ttctcagtag tctatagtat cccattttca catgcttctt aaaatgaggt aagaagacaa 300  
 acggtgaaac ttttttcaga tcattttttc agaagtcaat gccttgctga tgcaaagcgc 360  
 aacatgcttt tgtcatccct ttcattctga atattttccc agnggttact cagtattttg 420  
 cncacaaaaa cagttccaat acctggccnc ttaaaaatcc ataccaggtg gaaatcttct 480  
 tatgggattt aanggtcgga atcaagnctt tggtnaggg atcactattt cttacnggtt 540  
 ttaataana tcccn 555

<210> 8445

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8445

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gaaggaaagg aactttaatg agaaatcaaa acacaggga ccaaagtgc aatcatccac   60
ccccatggg ggggccatcc tgaacccac atcaaccctt cagccccctt caggccccca  120
gcgcaggccc agggcctgga gcttctgcct caggtagctc ttgagctggg gcaggcctct  180
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caggctggga gtgaggatgc gccacgggcc aggccagggc cactcaccgg caggagctgg  300
tagcccatca ggcctaggtg ccgctccctc agggccctcg agcccagcag cacccgccg  360
tcccggcaga aatgccagcg tccccgaac accagcacca cccttgcagg ggganggacg  420
tggctcaagg cattgcnggc aangtgggca agggttncct aaccttgctc nttacctnt  480
ggcaaggtct cagtatgcct ngagggaactg gcctttggca agacttgtgg tttgcaggaa  540
gggtctggtc ctac                                                    554

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<210> 8446

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8446

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cagatgtaaa atctgtgcta ttatttgaag tacagaattt agaatatatt cttaaaaata   60
caattaacac atcccactt ttctatgcta aaaaataaag aagactgtaa tacagagatg  120
ccttgattcc aagtatcca cttactttcc acaacaaaaa gttttgttcc agttttcata  180
aagctctaaa tcttttggag aaacactagg tcgcacagtt ctaaaagcat tttcaaaatc  240
aatgtaagct atgggtcgaa cttgatccgg tgttatggta gcaatgtcag cagtttgtaa  300

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actgcgaata ggaccaagag aagccccct gcaaagctgt gtcattgtctg ctcctgaaaa 360  
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 tggacattag attaattact atctggttcc tggctgaagc ttntgggang ggaatntaaa 480  
 gcccttttac caatcttntt cggcaggcct natnaattct tggggccgat tgggtggncc 540

<210> 8447

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8447

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 tggggctaca ggcgcccgcc accacgcccga gctaattttc tgtatttttt tagtagagac 180  
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 gaaagggtgt tggttgtaca agcagctcag ggcaactggt gcttgcgggc tgcatgtgcg 420  
 gncccaaaag cgtggnnttg ggttaccaa tgccttcaag gnaaaggcca nantgnact 480  
 tgacgggaca atcactgtgt gtggggggac ccatgtcggg tgggaggcct gganggggnt 540  
 tgcctccttg gag 553

<210> 8448

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8448

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cctggccata caggattaac gctgtgcctt acgttagagc aacaaacttg actgtccgtg 120  
 tatatatagg tgagggacaa agggtttctg cagccaagca ctgcactcta ttccgctgcc 180  
 tgggcggggc ttgagcagga aggtccctct tgcaccacct cctccacttc agttcagctc 240  
 tctcatgtct tccaccaaga ggacatggtc tttttccaca cagatcacat gggatgggtga 300  
 atcttcttac tcatgaaaaa cagcccaagg tactgctaata ttgggacgtt ttattttattg 360  
 gaaaggttct ttcaaggga cttttctgca agaccaagca atgtatgtat ttttcttttg 420  
 naaattacaa gttacattgg gaccaaaaac acatggngac taatgnactt tgcttctagg 480  
 ccaatttaaa gaaaagtntt tnatcctcac aaatccagng aanccttattt attctaaaaa 540  
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<210> 8449

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8449

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 gggatgcagg agatccacgg cagcacacgc agcctgcagg cgcagcacac aggcagagca 180  
 ctgcccagca gctggaacat gagaatgagg gccacaccac ccagctgcag cacaagccca 240  
 gcacggcgtg tcacggcacc tggcaccacc agaccagaa tggcctgtgc gagaggcgca 300  
 cgccactgac gtggctatgc tgtgatcaaa gcccgacacg ccggaagaag agccgcagac 360  
 attgtgggtt gcacacactt gcaggggaac tgtggaaaac cctgatnggg tccctgagcc 420  
 cttgaagttg cccaaggagc cgnacaagan gcaactgaag gccaaagtga aaacccttag 480  
 cncatgtngg caccacaactt ncttgcttca cangatgtta ggaagcccaa actttcttgg 540  
 ngngttagga caaaaaaggc cccctn 566

<210> 8450

<211> 483

<212> DNA

<213> Homo sapiens

<400> 8450

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aataataaaa tacaatttat taaaggantc atgtttacat agatacagaa catcttggat   60
ntttcaacac catagcaaca canaatnaat ttcttcatgt ntaaaagatg tgctgaaagc  120
tgcatgcctc atcantttnt attttattgg ttatggctat agttgacatn tttccatata  180
aaaacaaact gcacagcadc acatatagag tacagacatc ttaagttcat tcacaaagtt  240
aatttttcta aactgccctt caaaaattta catctttgct caattctaaa cattcaacaa  300
aattagcttn ccaagaaaca naaatgatac ccaatttctt tgcttttcta gaagtaactt  360
tccatttgnt catgtatttt gatatggtna tattccccac ccganttaaa ccctttgggt  420
aaaagagcaa cctacttttag ggtcaggcta aaaattaagn gtactanatt ttggnnngtt  480
ttt                                     483
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<210> 8451

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8451

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cacaaactat ggcattttat ttcagagcct ttgcttacat ttgtncataa tattacataa   60
ttcttcattg ttgcagatc ctaatatata ctttatagct tttattctat aagctttttt  120
cttcaacatt ttgtgtcaa caaatcttta cagtctgtga caaatttgaa taacttgaaa  180
ccattttcaa caaaattagt tactgtaagc acacactaca agactgaaaa tgcttttctt  240
agaaaagttg aatgtaaagg attctgacac gttagcatct acaacaaaac gcattgaaat  300
tcccacgtcg tattgccagg aaacaaagaa aacatgccag ccccatccaa aaaaagtnca  360
cagaactaca attaaaacag taaaacagtc tgtcaataaa gtctggggat taacagggcc  420
cgatnttaaa tagcttggat ggacncatcc ccatttccaa aggnntccaa nggggaaaaan  480
ttaatccann gcccaacc                                     497
```

<210> 8452

<211> 417

<212> DNA

<213> Homo sapiens

<400> 8452

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caataagtgg taacttttat taccaccata tgtaattatt gatttttcac agtttttaaat   60
acagaaacag aatgatacaa tcttcttgat tcttcccca gcacctcc aatcctggtg   120
tctgtagagt atagggtgtt aagaggtttc agaaaccacc ccagcccaga cctggaggag   180
aagctgtgat gacttctctt cattagctga acctacattt attcttggtg ctggccctcc   240
actgaggtct gtcttggaac tcctgatgag attcctgcct tgcccactgc ctgcagggtcc   300
tagccagcaa cccagtcctt gtgtggcatg ggcttctgc tgctggatcc ccggctccac   360
tgcacacca ccacacctcc ccagngnta cctnctntt ccnggactgn tnactat   417
    
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<210> 8453

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8453

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ggggagtagg ttttacttgc agtacagatt cttttcatta cagatcacia aaatacaata   60
caatgtgaca agcccagttt aagaattacg tgcagtagct catattaaca caaacagctc   120
cccacgaagg ccgacaagag ctaaaccgg tgtcaacagg gttcattgca ggagtagaat   180
aatccggtac aaggaacgag aacagattga aaccagaaac aaagccatgc ctgacagtca   240
atcaagggtca atctgatcat ttccatgacc aattacccat gtgaacaatt caaatgacg   300
gtggaagagc tgagcaccct gtactcacac acgatgccc cagcttggca aaagggtacac   360
aaacacttgt ttgaaaagaa tgactgaaac gtctactttc aaagaacaat ggacactttt   420
aaagggaatg ctgacattaa cttttccaaa atggaanttt aaaatgtnag tagtactctt   480
    
```

ggggaagaat ttgcctggaa ccgtaacctt gatttcccag nggtttaatt aacnggggtt 540  
ttaatttaaa actnttc 557

<210> 8454

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8454

atttaatttt tccttgcaac taatggaatg ctctacaaag ttgagggtca gagggggaac 60  
aattatatag aaatttcgga gatgtatatt ctttggcctt cgaaattctg gagcaaaaac 120  
gtctacaagc attttgaaat attctgtgcc ttccggcagaa tttcgtgtgt gatcactgag 180  
gactgaatcc aaatgccttg ctgcttttaa tgtttcttct gcaagacctt cttctttttac 240  
tagttcttca aaatttacia tatcttcaag atcaggaaca aatctaattg cattgctgct 300  
acaatgaaga ccaccagatc ttatcattcg tacatagccc atagcattac caatctggct 360  
gatgagttgc ctgaattgat caaggtagct ctgtccctca ngtgttattc caagttttct 420  
gatgcctcga ttgaattttt ctgctctatc aaaanggata cttatgatca ttttggggcc 480  
ttaatttncc tggaaaaatc gaatatcntt natcaatccn ggatttgatg gggatcatcat 540  
ncctnaaatg gctaa 555

<210> 8455

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8455

gttctgattt tgacaagggt aacttcttct ttattaaagc aaataactgg acataatctt 60  
aaaggattcc acctccatcg tctttcctaa cttagatctt cattgagaaa ttgggcaagg 120  
ttaagtttac ttttttctag tgctgcgggt ttggctcgtc ttggtagtct catcttcatt 180

tctgattctg gttctggaac ttcattgatca ctttcagagt cggcttcagc agtctgacac 240  
 ctctgtttcg tcttagctga aactgtcact tttctctgtc ctctgttagt ctttagctga 300  
 gtagactttg atgcttgggt tgcttttaca cccctgagtg gagtcatata tacttcttta 360  
 ttcttttcat cttcattttg gaaagtaagt tgtagtcaag gtggcatcct gtgctgcttc 420  
 agcttgggtca ccaaattctt tattnccttt tctaactgaa tcttgaattt cttccaaagc 480  
 tnttaagaca tgcctaact tttacttgct tccanaatct cattcaattn ganccggagg 540  
 atct 544

<210> 8456

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8456

ggaattacag ggtcacattt taattcctga attttacagt ttagcattaa taccaccaca 60  
 tgtatacaaa tgggtgtaaaa caagtacagt ggtatttttt aatacaaaat aaacatctgt 120  
 tttatggaaa aaactatact tcatacttac acagacagct catcttttcc aaacaatagc 180  
 caaaattaaa attactaca aaatctccag aacaggggaa actgcttttag attaaacgat 240  
 tccaggaaaa atggaccctg aacacattac aagggtgatc taaagattgt ggctggaatt 300  
 actgttaaag ttttttttcc ccaatgcatt aaattgtatt ttggggagat ttttctcact 360  
 tcggcatgat ctcatgatc agatgagcaa actaacatta aaatatttac agttaacttg 420  
 ttgctctaaa aataaaactt aactggttgc ctcaatttat ttttnaaatt cacttaccgt 480  
 atattggaat gngcctttac tctttttaa aaaaccggtt ttatntttcc ncccttg 537

<210> 8457

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8457

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acttttcaat tttattgtat aacttttcat taaagtgaga aagccattat attcataaga 60
caaacacagt atcaaagaag ttaaagtcac taggtaatga aataacaatc atctcaaatt 120
tggatgcaca tgctcaataa ctttttctct cagcctaaat gccttattga cagggaaaag 180
ttatatgaga ggaaaacaaa gtggcaagaa aactgcactg gccctcagg acaaaaactc 240
atcagggaaa gattcaaatg ttttaaagtt ctgcaaaagc aatatgaaa accaaagtcc 300
agcattgggg gcggttaaag gtgggtttgt gaataggaag aaaggctgga agtttcagct 360
cccttacaga gtacctggaa aaaagacact gattagtaat tacatgagct aaattctcct 420
ttagcatctc ttaagtatta attctctgca aatatttgga ttacaatatt tccaattgct 480
tccttgggaa aaaaatttgg ggngancnt ttcaattttc caaacngggg aanttcccaa 540
ancccttgg 550
```

<210> 8458

<211> 511

<212> DNA

<213> Homo sapiens

<400> 8458

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ccttcatgca ttttatgagg aagtcttgga ttaaaatcat ggtcaaccag atgttgcttt 60
tgcctgggaa gatggtgtca tattctgttg cagagtcac agtgcccatg atagataact 120
ccttaaattt ttagtttctt tgtggtctca agtctttttt tcagcagctc cccatttcc 180
agaagtgagt gcagataact gctctgcacc ttcccttgca cagtcttga aaattttctc 240
tcttccggtg agagagaagt gtcttctaaa ataagttctt caagtttaag tgcaattaga 300
tgtgtttcaa gccctttaat atgatccaca acattggaaa ttaaagtctg aagcccagta 360
acatagtctt ggaaactggt aaagacaggt ggcatgatga tgctggttcc tttttctcct 420
tttcttttctc tggaatttta ntttgggatn ggccnaggga acttttacag taccnggatc 480
cccaanggt anccggaatt ggtntaacca a 511
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<210> 8459

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8459

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attgtcaatc tttaacaattt tattgtaaat catagtgtga gatacagctg caaatatagg 60
gaagtaagtt cacaaactgt ttttttctaa agctaaagct aacattaggc cttgctatgg 120
tagaactctt cactgggttg tttcttaaaa aaaattcacg caactgacag gaggaattgt 180
ctttattctt gcattaatga taaatgtaat ctacaagatg gccttcatgg attagaaaaa 240
ggaatcagac cacaaggaaa aagaaattgc tggttttcac tcaagattta tctagaaaag 300
tgtactgact actggaataa tagtttacct ctgggttgta ccacagaatg agaaattcta 360
caagattata caactctttt tctacaagat tcactactca tattggtttt attccattnc 420
ggaattagga aattaacttt ctaaatatca ttttttttct ccaaaaaaat ccttttacca 480
gctacctgga tatggccaaa aatatcttga tgctgtaaag gtctatctcc ctagtaaaaa 540
tgaataaa 548
```

<210> 8460

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8460

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aaagctctga gcacgtgatt gctagttaa ttcaactgtt acacccatt ctgccttgta 60
aaaataacaa aacgctccta tcaaatgac attgtgatgt gactacaggc tttttgtttt 120
ggtacagctc taaaaaatgt tggcaccgaa tgcacttaag aaaagtgtta aggcttaata 180
caaatacaga gacgagtcatt ttctcaatgc agcttagagg gtgagaacag gatgctaggt 240
ttttaaatct tccaaataca ggcagtcccc aacgtacaga catacaggac acctcccaa 300
tgtaaacgac agccacacag cagggttgc atgcgcagga actcttcttc tcccagttag 360
cagactaagc actcttgaat cccacccac tggctcgcag agggaaagaa ggcaggacag 420
```



atgccangaa gaagtaatgt cangggcttc atacaagttg ccaagggctt ntgctgnagt 480  
catattttcc tcattcccat ctctgggttc tnccataacc canaagtccc tgnccaggggc 540  
ggaagtaaaa a 551

<210> 8461

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8461

gagtttcaaa tggagtatit tattcacatg ttagttatca ttttaacaca cacacaaaca 60  
ctgacacact ctggtttgcg tggaacaagg gtggtctaaa taccctaaaa gaaaatgaaa 120  
aattaaagta cattaatitit tcattactgt aggcaattac gtccacatca cttacaaagc 180  
tattactgat attgtccaag gaagcagagt ggtacagagg aaggaaactt gagggtaaata 240  
tcatcagtga cataacagat ctcaacatga gaaagctgac aaaacatgaa tttttgctgt 300  
gaaattttctc tttgcaaaaat atgaagaaaa gtcaatcaat gggcagtaaa taagaagtag 360  
gtggtgaact tttgctgtca attctcctca cagtatcttg cagaaggcat caaggaaaaa 420  
ttgcttagnc ctttttttgg gaccaatttc agaacttttc caattgcaat gggcttaccc 480  
tcatctcttt aaagtaaaaac cgaccattit ggggaaaaatc ttttgaacgt ntcgagggca 540  
aatgggtcct gntggcctta a 561

<210> 8462

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8462

catgattcaa cactgatcag tgtttaccac tggataaatc tgagttcaca ctttccttct 60  
ctgacctaaa tgtgaagtca ggaaacacat gtgccctact tccatcctga gctcagtcac 120

caatctccca ccagcctcag gccctccac ttctcagatc aggtcccaga cctgcccattg 180  
 aaaatgggga gcaggctgta acagatttgt ccacatgttc ctaccacctg tcccaaccca 240  
 gggtagccac ccagagacat ctggtatcat ttaacaaaca cattgaagga caactgggtct 300  
 tcagagctga agagagctcc tagggggaga agctgggaca acagtgaat aagtagcagc 360  
 agcaacgaca gaagtgaatg gtgacaaaga ctgctgtgat gagcaggtag cctatcaggg 420  
 tgagcttcac aagccgagcg agtntcagga tctgagaacc aaggttgggt aatgnccatg 480  
 agatgtcaca ccagccgga agccagnact tgcacaccn gcttcagcaa tagtanatgc 540  
 cccggca 547

<210> 8463

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8463

ggttcttccc aaccatctta cgacgttta ttactgtgat ttcagagaag aaacaggctt 60  
 acagaggtta agggcttgag accactcaac tggttttaag tggaatccag accagagggtg 120  
 ccggctccac gtctactgcc cttccacgg tgccatgctg cctcccaca aacatccaca 180  
 gtgcccttgg ccaatgaggg gccgccatcg gaggtcacag gaagcctttt cacagtcctt 240  
 ctggggcatg agtggggagc agctcttctc ccagagctt taaagccca tcgaggaagg 300  
 ggtgagaact gacctctga agtggccgag tgtgtgtgta ccgggagagt ggactcaatt 360  
 tttatttttg aaacctcatg cacagagttc cttatatcc ccaggtccca caagaagtac 420  
 caggtgccat ttaanaaccc ctntnaacc tntggccanc cctgnaagca acacgggcct 480  
 ttacaggctg gcttnttct ttggcacaca agcctttcgt tccatggaga atc 533

<210> 8464

<211> 396

<212> DNA

<213> Homo sapiens

<400> 8464

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acttgggttg cctttattta acattctaaa gaatgattat taaaagtcaa ggaccatatt 60
tagatctttc ctaacaaaga agaaataatg cttgttccat aagtaagcca aaaattttct 120
ctggttaatc aggtaactcc caagctagta agaacttctt ctgggactct ttatccactt 180
ttctacagga aacagaacta ctgcaggcaa gggtagcttt atcttattgc ataagtatgc 240
aaatattgcc taaacaagat cagaaaactc actaaatgag tagaatgggtg agatgagaac 300
atccttagat acattaagag ctaaacagga tgcaaatcag aaaacaattt cacttaaggn 360
ttgcttgga tctttnacat tagccttnn tgnanc 396
```

<210> 8465

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8465

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caggatatga atacagttta ttacagtttt cagactccca ttacgacaca tatctaaagc 60
tgaacattgc aaactgacct tactagcagc aattctccct agacaggaag ggtttcagtt 120
aatttagcaa ttaggagtaa agacaaactt acaagtcatt gtttttcttg tagcagctgg 180
tatatgagca gtgaaactat agatacgtag agtcattcag gtttagcctt gtctaaaaaa 240
acattaataa gttatgggtgc agaggagtat cccaggggtt gccaaagaga aggctgatgt 300
ctttagatgt cagtatgaaa caagcaaactc actttcaaga catggcttac tatttgcttt 360
actgtcagga caacagaaaa agaagtgggc agctacccta gattctagct cacacataat 420
tcagccngat aatcatcatt taaataatac cccttggaat ttttcagact tttcacaggg 480
tcttaaaaacn ccaccatcng acntaacatc cacattgttc caaaggacta aaatcaaaag 540
catttgca 548
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<210> 8466

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8466

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agaaaaggtg gaaatggcct tttatttaaa tatgaggaaa aaattagaat taagtacagt   60
aagattatit ttaaaaaagc agacaagtta gaacaaacat tttattatta aaataaactt  120
ttgtataaaa gcattacaga tcaaaagctg tatttacact tatcgattca aggtccaatt  180
atgcatcaaa cattgaatgg cacagcaatg gtttacatat gcaagtaaat tggacataca  240
aacacttaga ttccacctct accaaatacc ttgattaatg caaagaggag ggggaatact  300
gacacaggaa acctgcccag aaactagact ggcagagatg tcaggttaac aaactgctaa  360
aagttacatc ttcaaaaagg cacttatcat tgntataaaa gtgcttaaaa tctaaacttg  420
aaccttgngc ctggnttata aattaccaga aactgcaagn acccagacta gttttaatat  480
caagttccat ccaaaatggc cagaatttat tgcatacctt catgtgacng gaataacttg  540
g                                                                                   541

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<210> 8467

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8467

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gctagtttag tgtttgcatt tattttaaaa atacacaaaa tagaaatit tacatcaaag   60
tgtgataacc tcacttacac attgttccat acttacctgg tttgtttgc atctttctgc  120
aaacattaaa aggagatgga ttgattctg atttttttgc tatggttcat gtaaacagtt  180
gagactgcta cataaagtag gttgttgtca aaggtgaagt ggccacagaa tccaagaat  240
agaataattc aatttggttt aatgaaattg gtggaggtct tagcagatag ataatccaag  300
actaaatatt gtcttctagg cattttaaaa attaagaact ttgaggtttt cttcatgttg  360
taaacataac ttagaccttg gtggcattaa gtttaccaaa gaaaatatta aacctgatt  420
ttatcatcct ggcccatgtc agtatcacac tctttattat gagaatgaaa nccaantaat  480

```

aagccaaatc catcaggaat tcaaattgnc tggcaaagaa ggtcccactg g 531

<210> 8468

<211> 459

<212> DNA

<213> Homo sapiens

<400> 8468

gctcataaac aattttattt tttttctcag tatgtgccct tgaagattcc aaaatgttgg 60  
agtttctgat tctcctggga tcaaaggtaa aagcattgta tggaaacact caaccttggc 120  
tcattaccct cctgaggagc taagtctgga ggcctcagag agaggagct gacattcaca 180  
acttattcca agatgggtaa cacagtgaac aaagaattag taaaacatag actcagtctg 240  
tagagggctt caaatataca tattctatat atataaacct gttatatagg atttcaactt 300  
attggtttcc ttgtgatttg taattaacgt acaaattata aagatgttgc aacttgctga 360  
tttcccttc ttnagcccc ctctctccc aacentaat accattccaa anggcangng 420  
gatcctaana atttttggtg gtgnaaatat ttigtgttt 459

<210> 8469

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8469

cacattaaaa aaataggttt aatgcaggtg ggtcatggca tgacgaattt cacaggcacc 60  
ggggacagca ggcggccagg tgctcanagg gcaccaaggt gccacaactc cctgcagcgt 120  
tgacaccgca cgagcggcac caccagcccc ctccgcctc cgtcccacc ttcaccctna 180  
gccaanaggc ttgggtgact ctgagtaata cgtaacaaa aaacaaagct tntttgagga 240  
aacagcatga cttagtcaa aagattctnt gcagcaagaa atgaggccca cgcagggaag 300  
ctcccgcta cctgcccagg gcgtggacgc agcccgggt catcagaggt catccacaga 360

agctgccgat naattannag agccccggtt acggccagaa aatttttgct ttctctacct 420  
gatttaaggg ttttcaaaaa gtttctcttc cattgggaca caaatggtno tnntggnttc 480  
tggggccact tgttccgcct gacaggggta angtcncag gtccaacat tgccanaag 540  
tgtgg 545

<210> 8470

<211> 517

<212> DNA

<213> Homo sapiens

<400> 8470

gaactttgac gagcattttt tattgaacag ttttattctg ttttagaata aaaactttgc 60  
tttaatatg taaggggtac tgcaggtatg ccatgctgcc agttattgct ggggcacaaa 120  
acgccccagt cagtgattcg gagggctggg aaaacgcata aactcataat ttcagagcaa 180  
gtagaactag tatttacagt tttctttctt gaaattggcc cgggacatct ccaacagtct 240  
acacatgtat tgccatggta cttgctctga tgctctgaat gcctcggaac tgtgttcaat 300  
atcatgattt gtgggtcctc taaaagggtt tgttgttaac atgcaagcaa acagcactga 360  
acaatattgt ctaaactatg gctgccaagt actggatctt cataatgaaa ccaaattacc 420  
aaacactggc ttgtagagct atncaaagat ttaaatgaaa ataaaaaatg tcaacagnct 480  
taaattattca attctctaca gngcagttct atttttt 517

<210> 8471

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8471

gggcccgtac attatgaaga cattcgggaa aatgaggccc ggcaacttgg tgttgggtat 60  
tttgcctttg cccgagacaa agagttgaga aacaagcaga tgaaaacctt agagatgctg 120

cgtgaacaga caacagatca gagaacaaaa cgagaaaaca taaaggaaaa gcgaaaggct 180  
 atcttagggg caagacttgc caaacttga caaaaaaga tgaaaaaatc aaaagaaggt 240  
 ggaacagaag aagaaaatag agatggagat gttattgggc ctttgccacc ggagccagag 300  
 gctgtgcaa cccacgtcc tgctgccag agtagcaaag tagaagtcac tgtccaggag 360  
 aggaaggaca ccaagcctgg agtgccacac atccgggagt gggacccgcg ggaaaagaat 420  
 tttccttttg gatactgggc gaaaaagcag tcagatctcc gggcttaaaa gaaaatcctt 480  
 gagttttgcc ccgccgtcag aatacnttgg ngggtcanaa gaanactggg ttttccaacc 540  
 agccaggctt ggnccaaacc tg 562

<210> 8472

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8472

gaatctttaa aaattctatt tgagaccag cacacaagaa tacgatagat gtcctcaa 60  
 gggggcttgg ctcacagggt gaaggacact aaattgggtcc catctgattt cttgaggcaa 120  
 ggggtgaacc tggtttgcac aaatcacacc tgtccaaagc aaccacgagt tctactattt 180  
 tgcagccctt gctgctgggc gacgacgacg acctctctgc ctcttcttcc caccactaca 240  
 tcgcctcctg gggcagcttc tccctactcc accctgtata cctttcccag aatacagaac 300  
 ctcaggccaa agagagatgc cagccccatt aatcacctct actgtacccc aatcatatta 360  
 cgaaaagtca gaccaggaa aacaaggact taaaaagcca cgcttatagg gcaaaattcc 420  
 gnttgctggc ttcaagccct tatttcccgc ttaaatngaa nggctctgga ttatagcccg 480  
 cantaaattt anngcctcct aaatatnggt tgt 513

<210> 8473

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8473

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ggttttaaga agtaccaatt taataatgaa tacttagaaa tatggtacac agataccata 60
gtaatataaa atgcatacaa ttttaaatta ttttcttata aactctctac atgaatggct 120
ggcggcttcc aacagataaa cttttggaca aaggtacaag atatttttgg gcattcattt 180
taaataccat ctagttatcc aattaggagg tttctaaaaa aataaatatg acaaatatat 240
ggatttctga agtataaaact gacatacaaa tctatatatt ttcttaatac ttttcattaa 300
agcatcttta aagcattctg taacatgaag ttgagagttc aaattagatg taatgaaaag 360
gcatgaggtt ttattagaac tgtgtaattc acatatcaaa atttttaccn taaaagttaa 420
ccaaccccaa attggaaagc naaatacggt attttactct tccaggtacc aatttcagaa 480
aaactactcc tgggaaaaat taatatccc aattctgnaa ggtaatagga aacnttnt 538

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<210> 8474

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8474

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gtattatgct caaactaagg cattttatta gctggcttta caacttaa ataatcttgg 60
ctttcaaagg aacagcttcc actaattcca aattaaactt tcacaagttt acttgtttgg 120
ggagggacat tcttatggtc accacaaaat acttttatta taaccttccc caaatctttt 180
cttagcatta actggaaaaa aaaaaaaaaa aaaagcttag gtcaaatatc aactgcctga 240
aaaacccaat taagttactt ttccttaaaa catgtgcagt ataattgaat caaaagagaa 300
aactgcaaat acattgngct ttggccagaa gtagagttca tttcatgatg attcagtatc 360
ttcagatact atttttgaca cttgccataa atcttagcaa agtaaatcca tttattaacg 420
tttcaaaggc aaagttgggt ttaacattag actttctttg gcaactggca acttaaaaaa 480
tttgcanang ngattattna aacctntttg gagctnaatt tagcttttaa 530

```

<210> 8475



<211> 537

<212> DNA

<213> Homo sapiens

<400> 8475

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aacaaatcca aagtttaatt attaaggatt acaaatatTT ttagcagtgt agttaggcaa 60
tccaagcctg gacttccact tcattcctac taaactactt gcagagctga ggaggcagga 120
gactagagta cagagagcat tttagtttta tcacaaaggt ctagaactgt ctctacagtc 180
acaggaagaa acaggtatgg caccgtggcc agaagggggg aggtattcac agagagtggg 240
tatcaaggtg tcaaactttg tcttctgata gttttccaga gattcctgta gagaagggag 300
cagggagagc ctactatccg aaaccattcc ctgaaccctc tgaattctga agcatgtgga 360
tttctcagtc ttgttctacc catccccitt cccagctttc tgctcctttc cactcacctt 420
tccttcccc tgGCCatttt cttccccatc agagtctaaa accaaagtcc cctatggtaa 480
tgacggactg acagagaccg gaggaccact gtaggaggga accngaata aacttct 537
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<210> 8476

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8476

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cttcaaattg cttttattat acagttgtaa tggtattaat tataaacatc aagtctatTT 60
tcacacaaat cgtcacgagt ncacactgat aaagacatgc gctgggtaag agtcattatt 120
ggtacataaa catactggga tttgggcata aaaacacagt atcaattaat agcttttagca 180
gtctcaaaat agacttcaac gacattcata tatatttcct aatttaaatt gtgttagaaa 240
cattgcatct actttgagga acaaattctg taacagaaga gggaagacag gtaggcaaga 300
aggcaggaga tttttagttg tatactaagg tttagttttg gcacattgaa agtatcattt 360
ttcctattag atttctgaat ttgtgaacaa acattaacag ttgctgttct ttaatatgac 420
ctcattcata ctatatttgt gggaaaatac aactttagtt ttttctggtt acttatttnt 480
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ttaattttcc actattgntc antggaagga cttacccaat antttttaga agaaagaa 538

<210> 8477

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8477

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 taaaagctag cttgtccaca tctgaaaatt cacttttgtc ttgaagtcca gtttgtcttc 120  
 gataaagacc cactttctgc tccggagggc tggagacagg agggatggag aggctgtgcc 180  
 tagactcagt ggggtgatggg aggggcattc tgtcaggaca aggactgggg gaagcaatgt 240  
 gtgatctgcc cagaccttcc agatacattt cactttcgag gcttcttttt gcttttggaa 300  
 ggggtgtgga agagaggcgt ctggaggaag tgccccgcg gagcctcgag gctgcactgc 360  
 ctgtcagtgc ttccacgacg tcattccttt cttcaagtgt gccacttga ggctgtctcaa 420  
 agacaactct gncctcttca aaaatatggc ttttccgggn actggaaata atggtttttg 480  
 aangntttcc accagggccn aaaatggggg ggctctttgc tgctannggg cctttggg 538

<210> 8478

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8478

cttttttttt tctcattaac aaagcagtca attcccttta tttttaaatt tttatgtaca 60  
 catatgaatg atctgtataa tgtacattca atatagaaag ctttatatat ttgatagtgt 120  
 atagaacatt tcacaattac actcatcttt tacataacat cttgacatcc atttttaaat 180  
 tttttgcac aagctccttt tcattcaatt tggtaaagcc agttatacat actaatgtgt 240  
 actgtgagct ttcagaaggt taatgattga ggatgccagt gaagggtgca gggacaaaac 300

ctaatagtct tggatggtgg ggggaggatg gccacgcaga cttgatgcag gagagggaaa 360  
tattctttcc tggggaaaag tgacttagcc caatttttg tgactgnagc tcaaccctac 420  
agtcattgcta gticaaaaaa aaaatttcca aaactaggaa gaaaggtttg gctttttgat 480  
cacagtttgn aacngattta anggaccaat gngncttcat ccccnngaaa aaaaattntg 540  
gg 542

<210> 8479

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8479

gtcctgctgt tttcttaaaa actttttttt gataccaata tcttcttatg gtcagagtca 60  
caggcattct agatgtagaa gcttaacatc ctcttttgga gttatatattt ctgacaaaca 120  
ttcactacaa atgtaccaag aaaagagaag gccagcctcg acctcgctgt ggcacatgag 180  
ttatccttca acagggtgtag gcattttgag tcagagaggc ctggacaatg aagagacagc 240  
acctcaggca gccttgccag gagccactgg gtttcatcct ggcctgaccc agaaaaatct 300  
tatggaagag aacaagaggc ccaagagctc tctgatctgc tgtcaaccag ctgcagccgg 360  
gagactgcca aagcgcttgc agtgactagg cagcggccct acagaagccc gctgggaagg 420  
ggattaccag cctgatccct tggttttaga agccngaaat ggctcaactt tacaacagca 480  
ngnctgnca gggagggggc catgaccctg gaaagggttt ttccccttgt gggg 534

<210> 8480

<211> 487

<212> DNA

<213> Homo sapiens

<400> 8480

agatgaacac cgttttctct tgtttattta aatttgggag ccaaattggt tggagaaggt 60

aatgatggtt ttcaaaatac agtaagtctt catttaacat tgtaataga acaatgaaaa 120  
 ctccaacttt tacgtgaaac agtgtatagc cagtcctcaa ataactgcct tttgttcaac 180  
 atcctttcct tgtaacaact gatgagaaaa agtatggttt tggtatacat catttctctt 240  
 gaagtacaag ttttcaagaa cctattgaca aggttaagtg tgggcttaca gtttaccaat 300  
 cttagcctca gattgggcta gggcagggat gacaaaccag gctcttgcac gggctctttaa 360  
 atggactggg caataaatga agactttggc ctgtaaattc ctaaatagct tctttgcttt 420  
 tgncccttan gaatgcacag nctcattgnt acangccatc ttatggtcag tagaatcnna 480  
 cccgaat 487

<210> 8481

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8481

aaattaacca gatctgtctt ttaatagtta ccagaattta gatgttaatt cccagagga 60  
 aaaatgtcca tggcacagtt tttctggaaa agttcacatg tagacagtga agcttctgaa 120  
 gttaggcgtc aaattagtag tgacaatctt ttttttaatc ttgaaagtcc ctagttttta 180  
 agaaagtaga atccatctgg ggcatgtctg catcacaggg tatcactcaa gagtcatcat 240  
 caggccaaaa agactctgaa gggaaccagg agggtttggc ccttgctgtg gaaagatgct 300  
 actgaaagta taagagaaca ccctaattgca cgcgtcaggc acgaaaccg taccatgccc 360  
 cgctaagaca tgggaccaga gaacacgtna acgtcaaggc cggtncanga aaaccattcc 420  
 caagaccacn gaagctaccc gaggtcgaca ctgncatgaa aagtgttgct gaaccgcagt 480  
 tnccagggct ttactggccg aacatnccta aggcacggtt gggcttgtn 530

<210> 8482

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8482

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cctttcacia aatggatttt tattgtggtc atacatgggt tctcagtgcc acagaaaatt 60
gctatgtagg gacaaaaaat ttttgatgg ctctgtaaag aaacatggta ggttttcaga 120
aatgagttgt gcaggaatgt ggtaaatgaa aagcagaaag ggtaaggga agagaaagga 180
agccaaggag tgtggtatgt acatcaaatg attacttttt aagccctctt aggctctgat 240
aaccctttcc ccaagtcaga tcccaacaaa attcatcagt aactgaagtg attgtgctaa 300
cagatacata aagactaccg gagaaaagtg ggttgagatg ggctcagact tattgttagg 360
acaactctgg gagtcttgtg tctgtgccaa ccacgtatcc gtgggctacc tggagatgaa 420
gttctaacia cccagcacag aacccaaagc tgntnttcna cacctttggt tantngggga 480
aanctttatn ggggccca 497
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<210> 8483

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8483

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gaaaagtcac cacaatcagt ttaattaagt gcacagaata gcaatcaatc aatcagtcac 60
gtcaataaaa ataaaacaat tatttttaca tcaagtgtgc tttatttcct ccacaggtat 120
tctgttaaat aaagcaccat ttatatactg ccaggccaca gctaaagagg attctttaca 180
gaatcaaatt tcttgtgggt gtccgtata caagtaaact taattttgat aataagaacc 240
acagcgatcg gaggcaatct gcctctataa ggtacaaaac tggcacagag gacaccatat 300
catacacagt aaaaatgctg taagtttaaa ttacattgta cagggttagg caaccctgtt 360
cttcccagac agccatatta aatgaaagcc actaaagtga actcttaatt acataaaaca 420
tatccattat ctggatgccc ntaaggaag tttactggaa atgccagggt tttcatctgg 480
aggtttttgc ttgccccaaa ntaaccctt taaanctttt ntggcc 526
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<210> 8484

<211> 493

<212> DNA

<213> Homo sapiens

<400> 8484

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aaaagaaaaa tgttaagact ttattcaaga tgtgtatcag gcattataac aaaacagcag   60
aacttcaacc ttiggaatac tgtaatttta catccctttg atgcacagtc cagtatacta  120
ttttattaca gatcattcta tagggactac agacatgaac tagaggaaat gtgcacagtc  180
acaatccaga atatcagctc tgggagtgtg cactgtttgt tagaggatga agcacatcct  240
ttgccatttc aaatactgtg ccagggtggag gactaggaag gctcaaagat ggtcatgggt  300
gacaagcact cttatcacaac acacatggat agcttatcac ggagaacaca tttcaaaggc  360
cagcaaagtg agcaagctat tcacacaaag ccaggaggga ttatgactaa actctccagt  420
ttataagcac aagtnccacat ntcacctctn agaacangng ctcaatggca ttacttaaag  480
gtnttgcntg gac                                                         493

```

<210> 8485

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8485

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ctgtttatga cactttattg atgctggggg ggtggggagg agacctggag aaatatgtgg   60
gggcaagagt ccccagggtg ggacagggaag agtggtgaag cctggccact actgggcagg  120
gaagacagag ttgccactgt atgcacaggg gatgagcagc tgccggtact ccaggggcag  180
gtgccgctcc actagcacgt gcagtgagac ttgggtcagt accaggccct gccgccgcat  240
cagcagctcc aggtcctctg gcttcacagt cttgcggcca gcatgagcag caaataacctc  300
cagatcatca caaagatgct ggaaatattt atctaggcac ttctccacca tctcaagagc  360
cttcctctcc atgggcatct tggcatagaa gctaaagagt ttcacatagt gggctcaagt  420
ccaaccttgt ggggatcttt gccngggcct ggggcccgtg gtcccgggcc taaggggatn  480

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ctgaccacaa aaggttttga agctntgaaa ataaaattga gcaccagccc ttgggcttgg 540  
ttaanaaaact n 551

<210> 8486

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8486

attttagtag agagcgggtt tcaccgtgtt gcccaggctg gtgttgaact ctggagctca 60  
ggcgggtccgc tcgcctcggc ctcccaaagt gctaaggta caggcttgag ccaccgcgcc 120  
cggcctcaaa acacttttct ccacttattg gccaaagacac attattactc cctgtttgca 180  
agtgaaaaa cagaggcaca gagaggtag tgtttggaca tggtcacaca gccagttaat 240  
catatgacca cagaggctgg atctcctgag ttttaactg agctgtcatt cagtccatag 300  
ccatttattg tctttcctcc cagccacggc gcctttcctg tgctcgtca tgagcttctg 360  
tgttatgaag aatgaagcat caaagggtag tgtatggtta actctggcgt cttcccactt 420  
cgggtggctta ttaattctca agggcagnct cataggagag gatattcagg catgccagcn 480  
ggatttgggt gnctactggg gtcacttctg gncctttaca ccagcctntg gggaaaagtt 540  
cttaccan 549

<210> 8487

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8487

aagtggccac tattttatta ataatgcaca taacatatgc ttatcattaa ctcttaaaaa 60  
gattattatt taactataca agaactacca tacaacattt caacatacaa gttcctatac 120  
ttcttaagat acacaataat attttgaaag attggaaatg tttccaagg actttcctat 180

cacaaatccc cccagtaaa aattatagga actgtggaat atggctgcta atattctgag 240  
 atgaatttag aaagtataag tattgagaga tggactttat tatagcacct gtagaagaac 300  
 caaattcagg catttateccc atattttctg aaatatattac aaagctctta taacattttc 360  
 aaataacatt taattttacta agttctatatt catggcaaata agaatacaga aaatttgagg 420  
 atgctatattt ttaagttttt ccaatacagc ttaagctttt gggataaagc tggttttacta 480  
 aaaaggatcc ggtctcaatt ggnggngctc ggtctctttg gcaatttaga gccctgggta 540  
 agcacatgca 550

<210> 8488

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8488

ctagaccact gagaaaatct ttatttaca taaatttcaa taaaatttgc ataaatatat 60  
 tcccaatgta caattttcac ctctgatttc ttcatatcat ttaaaaagtt agtctgtcct 120  
 gttctcctta ttcctttcag acaccagtgt ggcgctgaca ttggcagggtg gaggggagct 180  
 gccagggagc tgggggggtgg ctgagggtc aggctgcttg ggggtggacct ctctctgggc 240  
 cgccaggctt tcagctccat ccctgccctc cagtttctc tccatggctg ccaccaggat 300  
 cttgagccac gtgttctcgg taaggagggtt ttctgaggca tcggccagct cctgcagctt 360  
 gcggggccagc tcctgcagct cacgtggtct tctgctcata gagggcctgc actgctcact 420  
 gtgtgcgtgg agcaagctgt gctggtcttc cangggcccc tgctgctgnc gaacccgggc 480  
 tcaanttttc ggcaactggan aacttgggat tcanctgnac ttgggcncct ggaggtggtt 540

<210> 8489

<211> 537

<212> DNA

<213> Homo sapiens



<400> 8489

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gacagtccca cacaaatcaa tttttaataa tttcaacttg ccaccagctc caaatccagc 60
tgccttgggg atttatcacc agggaaaaca ctaaagccc caggctgagc tatccatcca 120
gtgatcagat gaccagcct gtgatctctt aagaacctac atctacacat ggcagcctgt 180
tagtggcttc tctggaacta gtgcatagct gctcaatggt agagccagaa ctctggttcc 240
cagggagggc gagtatccca aagagatttg aggttaaag gatggcagtc caggtggtcc 300
cagacatgct ctactgctg aattcctgca cttactccta gaatatacca gtgctgtttg 360
ctcccgccat cctgagggtt ttaaaaagng ctttaaaaag ggaggatctc gaagcancaa 420
gctttttcaa angcactgtt gggaaagcct atagtgggtc catggaggct nttccaaggg 480
aggaanncna agccaacttc ccataagtca ggggnatttg cctggggccc cnccaat 537

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<210> 8490

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8490

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gaggtatctt tggaaaattt aatttggacc atattttctt cctctttctg aaaacatcaa 60
atatcccat acagtttggg ttccacagct taaaagggg cagtgggtt cccgcagtta 120
cactactgtac ccaactttct atagaaagat aaaacatttt ccaacctgc ttttgagtat 180
ttcctaaaaa atgctttaaa gtttccttac aataaatggc aagtaaaaca aagtaaggct 240
ttttttttct ccttttcccc tttttatgta ctgcatgttc naggaataag gaaggaagac 300
tagttccatc agagtactag taatcctagt accctgggga ttactgctgg atcctcccag 360
gtatacccct attattgagg ccctgatgca cccctgcact gaggaacctg agaagggtaa 420
gtactaaaca ggctgcatag ccacgtingga ctgttacaag cacaaggtgg gactgggaag 480
tcnccaagtc ttctngnggt taccaggagt accaanggac tnnggcttaa ccct 534

```

<210> 8491

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8491

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gccttgaaat gtttttaata gaattggtct agtaatcatt caggatttcg gtgatgggcc 60
ctccctgtcc ggacactgcc aaccacagc tggaggggca cttaggcac gtcattttgt 120
gattagaatt acacaaaatt tgattaatat tatagctgca aaattaacat acacaatttt 180
cactcataat ttaaaatatt ttgatgaaat tctttgcttt cacaatagaa gatcaatggt 240
acacagtata ttgaactctg taacaaaatt atttttgaga aaatacagaa gtgagaaata 300
gtgatttcct caatttggtt atagtctatc acaaagtagg ccaaagttca gtattaaata 360
gatatcctaa taaaagtttt tacaagtttt nctaaggaaa tccattcata agactgnnta 420
ccttctggtt gacagcagtg acangaaccg tgggggatcc ccctnatgga cgagtncccta 480
gccttangcc ctgnnaccca aggccccggg ggcgctccgt nacctggtag 530
```

<210> 8492

<211> 454

<212> DNA

<213> Homo sapiens

<400> 8492

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gggcatatit atgcagttgt ttttatttat ccaactgnaa agactgcagc aatttttttg 60
atgagtaatg ccttagatta acactaatta tattgctata aatttggttc aggatcagaa 120
tagggttcag gaaagggaga gaacaaaaaa aaaagtctcc aaacattaaa acagaaaaat 180
gctttttttt tttttttttt ganactgagt cttgctctgt ctcccaggct ggagtgcagt 240
ggcncaatct cagctcactg naggctccgc ctctgggtt caagcgattn tcctgcctna 300
gcctcctgag tagctgagat tcaggcacac gccaccatgc tcagctaact tttggatttt 360
tagtacagac agggtttcac catgttggcc aggctggnet tgaactcctg acctngngat 420
ccccccgnct aagcctncca aangctnggg attc 454
```

<210> 8493

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8493

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agtttttagc ttctttattc atttgaacac ttcaatattc tgtcttcttc aatgattccc 60
ccttgcccgt attttcagct ggaacagttt ctcatcttcc ctatttctga acactttcag 120
gggcttcctt cagtgaagcc caacacacaa aacgtccctt tcagcaaaat ctgagcgggtg 180
gtgctaaggg actaacacag actttaaggt cacaaaacca ttgttttaac atttttctct 240
gtttcttttc tgataatgat gacagttctg tctctattat atttgctgaa acttactagg 300
accagtgat actagctcat cctctagaga gaggtcccaa gagcattaca ccagatctcc 360
tacgaagatg tgggatttcc tctaggaaaa ggtgtgtatc caggtaattt actaagccag 420
aagctgctgn gattctatgg cagccttata ttcttatgac acgtcattta ctaagaattn 480
ggggatctgg atgatggcca anagtggctg gactnaaagc ctggcccan atggggggng 540
gg 542

```

<210> 8494

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8494

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aaaatattta tatggatcaa ctttattgaa agtgaataaa cagagataat gnggcaaaaa 60
gaaattttcc caatattaaa cccttgatga tactttttaa ttactataa ggaaaagaat 120
ccaccagtag taggtagcta cttatctttg ctgagtgctc tctgcttttc tgcattgctcc 180
acaatctttt ctccacata aagccccctc cgctttcgta ctgcgttcac gtacttccgg 240
gcttggttct cagagtcagc ctctcccca aagtgaagt attcctctc agtagttggc 300
accagaagg ggtcactggg aatgatctcc caatggctga atactagttg tgggctggcc 360

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aggccacttg ncctcttctg atttcatcag caaaaccaa gctttcagca acaggcagca 420  
cagcttgatg atgaacatgt ctggcccttc tttcatttct tcttgaagac ccgacctnt 480  
cttntttgac aagacagctt agactcgacc gagaacatta cngtgggcat gatgtct 537

<210> 8495

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8495

atgtgttcaa aaaaatgttt tttttattga attgaatggg agctaaagta ggataaagt 60  
gagccaaatt ataaatagga atataggtag gagttcattc attcagtaaa tattttattga 120  
atgcttattg tgtccaggcc ctgttctcag ctcttagaat acatccatga acaaaccaga 180  
taaaaacttc tgcccttgcg cagcttatac tctagatcgt aagggatggg attagcaata 240  
aatttacata aattcaacca tacctactgg aaaaagacac atgcatggaa attattaatg 300  
ctataagaat ctcttgatat gcagtttgta ttttgnact taatataagc ataatatatt 360  
catacctaca tatcactccc agggatttaa actttaagac tacnaagaga aattttattg 420  
taatctaagg agattttcaa ggccatctga gcatgctcaa ttttggccct angcacggct 480  
tttaaaacct aaccccccta caggtgngga ttccctgnnc caaatggaaa ctttg 535

<210> 8496

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8496

ctctctagta atgactttat tcatgaatct ataatggaat tcaaaatagc aaagaacatg 60  
aaaatgttca gattaatatt tattaaccaa atgcatcaga aaatacatct attttcacat 120  
atcaaaagtg cctaaaatgc atgtgagaat ataaatattc tccactttgt ggaacttcaa 180

gataatgaaa aattgcctaa tacactttgc cacaaaaact cattacactg caaatacaga 240  
 agaaataaaa taactcatta cattgcagat caaaagaaat caaatgtaac tggcaaaaata 300  
 accatttcat ggctaattctt ttggtaaagt gctattttca cactgaaaaa aagaaattag 360  
 aaaagattaa aaatttttaa ttctgaacca tcattctgaa agtctgaagc gttttcttta 420  
 gtattcacta tggatcatcac attcatgngg tcccaccatg agacttaaca ctttctcaaa 480  
 atcttaaaaa atctttcatt cncggattat ttccggggag gttaaaaatt ttncctcatn 540  
 gtn 543

<210> 8497

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8497

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 cccgtcctga tgcaagtttg tggtttcctg cttcaggagc atcaccatat tgatgccaaa 180  
 cttacaccca actggcatag tgtaccacag ccanaaactc ctgggctcta gggatcctcc 240  
 tgcttcagcc tcctaagtag ctggggctgt acgcatgtgc caccaaact agcaattatt 300  
 atttttaatc ttagaaaata aattgngtat agaaaggaat agttagcaca ttatgtcta 360  
 aagaggaata aaaaaggga actgggggtt acacaaaatg cattgnagt actgattttg 420  
 aacancctat caggtnctt caaccaaact gcncaggaga tgcatttagt actnaacca 480  
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<210> 8498

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8498

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atggcccctc tggttaaggg aagcttctct tcctaccttg tccctgtcca aaatcaaagt  180
gctgaggcag ctgaaggagc ctccgcaatt acttctggat ataatgtagc aggaggctgg  240
aataacatca gaaacacccc acccccaccc cagagcacia ccaagatacc gactttctgg  300
ccctggccct aatcctaaac tctcctcctt tgcaagctga caaagcaagg atttgtatgt  360
ctcgagaggc atcagcatga cccctgaaat tcagatgcac ggcggagggg ttcccatccc  420
attccagctt tccagccttg ggctgattgn gaaatgagcc aaaaccaacc attttccaaa  480
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<210> 8499

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8499

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cagattccaa aagagtaaat ttactattg gagtacagtt agattgtaat cctcttgaaa   60
cagatacttt ttcctttcct aatcacctag atgacaaatg taagacttac cctgacttg  120
gtccattgat ttgttcattc attaatcaa caacatttac taagtttctc catgtacact  180
ggactgctca aagctctata ggagatacag taatgtgctt tgctgcctct gaatggagca  240
gtgtccctcc cagcctatgg gcatggctaa attttagaag gattcttctg cttgtcttca  300
actcaaaga tcagcctgaa cacggagtga aatcaccagt gttcctggca ggaagagacc  360
ctgttccaca cccaacacat catcctaata gtaggctttt gacacagtcc tattaataa  420
tgaagcatgt ctctgtctaa gtttatataa tcagtacttc ataattcaga aactttgcct  480
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<210> 8500

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8500

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tgggactaca ggcggtgac accacgcacg gctgactttt cttgttttgt agagacaggg 180
tttcacccat gttgcccagg ctggtcttga actcctagcc tcaagtgatc ctcccacctt 240
ggcctcctaa agtgctggga ttgcaggcgt gagccgctgc gccagcctg tttattttca 300
cgctcacact gccccaggct ggccaccgta tgctccttcc catccccccg tgttatttca 360
acaagtctcc tcatcccagc aattcttcac tctctagctc atctgatacc ttctctggcc 420
tgccctggt tccttttggg tacagaatgg tatcagggcc aaaaccctga gtgcaccggt 480
caatgngttc aggnccctnaa aacttggnaa catttgggca caagccctta naaaaagncc 540
cct 543
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<210> 8501

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8501

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cagataggca cacataattt agattagaaa tgaaaatggg ctttaagccc tataagtatt 60
gttttccaag aaaataagtt ttgaaagtgc aaaatgacaa ctcaaaaagg tcccctttcc 120
acctcatgca ggcaaaggac atttaaaagc acatccaact aaatcaaaaa agggaggatt 180
agaaatcaca ctagtctatc cttcattatc agggctggct tcaaacctga atgtttctga 240
gtgggatatg ttgcaaaaaa aaaaattaaa ctagatccaa gttacatttc ctctaaaaaa 300
aaaaatgtca aaggacagct gccaaagattt gtttttaaaa gacaccttc aggtaagagg 360
tagtgtatgc tagctaggac tacaggctgc caactcaaca ttgcttgaga acattaagtc 420
ctttgaagca tgttccttgg agtctattaa acattctttc tctgggggtca aatgtcaagc 480
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catatccaat agcatcttct ggttcntgga atcctttctn ggaactggat tcatecttgn 540  
aaa 543

<210> 8502

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8502

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atattggtca taaataacat cttcccaaag cccaacagtc aaaaaacaaa caccaaatat 120  
aagcagatta ggcagatttc ctaaatactc agttaaggct atggtgtgct tggttttgac 180  
cagagcaatt ctatggcttc cttttatfff tctccctgga taaaactatg cttacttgat 240  
ccatgcaatt tcagttgtta cagctttaac ttataagatc aaaggaatta aaaagttgtc 300  
agaatagatt ttcaaataat gacaaaaact gacataaagt ctacacagaa ctgacataaa 360  
gtctacacag tcctcaggga tatggataaa acaaatgaag tttcatgact ggaagggggc 420  
tcccttctaa gtaaataagn catagaaagg tatgtaaagg cttttttcat gaaggttcca 480  
aaggggaaaa ntttaaacca tgggtcaaga acnctggtn ctaaattggn gaataagggg 540  
ng 542

<210> 8503

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8503

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aaggaaaagc aataaggcaa acttgccaat aggttcatga acaaaagtca attatggaat 120  
gtggcagaag gcaaataata atgtattcaa agttttacct ttaacaatta cacttgtggt 180



tccagttatc tgttgataat ataaattact ccgtatntag tgactcaaac aacaatttta 240  
 tttctctctc atgggtcttg agtttggtg gattcagcta ggtagttctt gctgagggtc 300  
 attcatgggg ttgtcatcgg atggtggctg gtgatggaag catctgaaga cttactaatt 360  
 gcagccaggc atggtggctc atgcctacaa ttccagcact ttgggagact gaggtaggag 420  
 gattacttga gcttaggagt tcaagaccag cctgggcaac atagtgagaa cccatttcga 480  
 attatttnaa aaaaaaant taaanccaaa aggaantgaa ggcttactac ttgcntattg 540

<210> 8504

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8504

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 aaacattttt tggncgtgtg gaaaatgtaa ttcctgagat cattgttggg ctttgtcaat 180  
 cattttcctc accatcaaat caccttaagt gacttgggag tgtgaatcta ggatgttcaa 240  
 ttttagacca attttctcta tcttctaaat gagtaaacag gctctgtctt ttataaaagg 300  
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 ctgaacacaa aggaagtctt ttctgaatgg ctctcaatca cacataagga acatatgntt 420  
 tccagttaat ctgtccttga tgtacagcag tncagctggt gctttgcctt tattaaaata 480  
 ttctctgctt aaaaagttat ggttgcttta aaaggnaatt gncctaaaat tccttcant 540  
 tn 542

<210> 8505

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8505

cataaaaatg taagttttat tgagtgccta tagtgtgcat gggcctttat tagacacgcc	60
aaattcaggc acaacagaca caagatccct ggcctcaggt accttatgat ctaattaata	120
gatattagaa acagtagaaa gacaagttac acgtcaatgc ccaatgacta gagtcaacat	180
taaagagttg taattttaagt aatccaaact gacatctaata tccaaaatca tttataaaat	240
gtatttggct ttggaatcca caggacttca aacaagcaaa gtttcactgc agatagtcac	300
aaagatgcag atacactgaa atacttaaga gccttattaa tgatttttgt tattttggat	360
cttctgnttt tttcttatta tgggtccgaag cctccttaata accaatttat cagacagaag	420
catgtcatct tgggtggtcaa gataatccag taaatttcag tccattcaag tgccgcttta	480
tggctaatat gcttctctgg atcagtcctgg tttctactct tactggaang nttttgctca	540
an	542

<210> 8506

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8506

cttaagacaa tgatttttat tacctttagt ctaccacatt tgtcactata aatataactta	60
ttgaaaaaaa accatactat ttaaataaga attcagttca tgaaagtta caaaatacaa	120
ccaatgtact ctgacttggt gttatatctt aactatctca actgtacttt tctggtatgg	180
ccagaccttt tgcaaatatt accatggtat ttttaattta tgatataaaa cagtagcaat	240
ttattaagtt ttccattata aaaattaata tggcaattct caaaatactg aaaaaactgt	300
tttatgaaag cagtaccac atcactgcaa cgtatttcct ttctcttaga aaacatcttc	360
aaaaggcaca ttttaattac tagtgtttat atctaaagat agtagtttga gttttgaatt	420
tccgtcaatt ttccattatc tcaaaattga gctaattggag ggttggaaga ggtaggagaa	480
cgcanggttt caatggactt cctnanggca gcanaatccn attcattttg gccctgggga	540
nc	542

<210> 8507

<211> 174

<212> DNA

<213> Homo sapiens

<400> 8507

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gattttaaaa aatgtatttg tgttttgcag gttggaacgc aaaccacgtc tggccacgtc   60
ccgtgaagtt gtggacaaaa tgtttcagtt tctgttcacc tctgtgcgtg tgtgtgtatg  120
tgttgtgtgc atgtgtgtgt gtgtgggggg gtgggggatg gggtcggnnn nnnn      174
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<210> 8508

<211> 312

<212> DNA

<213> Homo sapiens

<400> 8508

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gtatTTTTTT tttttttttt tttaccatta aaaacagtta tgaaatgtgg catcccgttg   60
atgcaaggac tgggaaagcc atttttatTT tttttttttt ccccaaactc actgtaaaca  120
acagtaactt tggttaaaat aaaaaaagtc ttctatgtag gcagagcttt gtcttttcaa  180
agaggggtggg gtagggccct gaggggagta aggtgaggac aaggaacaga aaggcgtgag  240
gtgatggagg gaggggaggt ggaaggagga nagagaaaca ggnnagactt tttcccangg  300
ganaanctgg nc                                     312
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<210> 8509

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8509

acatgttcat accaacttta ttcattgatag ccccaaacta gaaacagccc attgttcacc 60  
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 ctcagccata aaaaggaaca aagcttaaac acactgatga acatacaaac atgctgagta 180  
 aaaggaactt acagaataca tactgcataa gtgagtcctt tatatgaagt tctagaatag 240  
 gcaaaaattaa tctacagtga acaaaatcct aacagtagct gactgccagg ggaggggaaga 300  
 agggacagga gagagagggtg caggaattga ctaggtgaaa aaattcagat gtaatacaga 360  
 tgttcagac ataggggttt gagttacatg cttttacatc aaaactcatc aaatgagtct 420  
 gggtatnggg gntcacacct gtaatnccag ctactcgga ngcttaggca ggagactccc 480  
 ttgaccagg aggtggaggt tcantgagcc cagancaggc cctggacttt taccctgggg 540  
 gatn 544

<210> 8510

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8510

cggggtgaga cgggtttatt gtgcacattt acacagcgtc agcagcgtct gggctggcag 60  
 cggccatgct cctgtggctg ggctgctcta caaggcggtt cacttttctt caccacacta 120  
 tgtacagtca gtgctccaag gtgatgggct acagtgtgc atcagtgagt ctgtacacac 180  
 atttttacat aaattacaca cgactcatc atgaaaaata gagcctaagg gcctgtattt 240  
 taatgagaaa aaaaaaattt ccaacatagt tcgggtagct ttgaatggtc tagtcaaaaa 300  
 atacttttgg tatataaaaa gcctgtccgt acaattcaca ccttagtgaa agcgcccttc 360  
 ttgccttgag gctgggcctg ggacaaaggt ggcctnaca gccagcccag gcagggagat 420  
 cggcagaaaa ggggtggccc tgacccagn tncntnggcc cagctgtgc tccttggtgg 480  
 gcgggccctt cttgacacca ggcgtntggc atccttaagn nccaaacaag ccccgtttac 540  
 tggncctggc tggccttaaa caatccacc t 571

<210> 8511

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8511

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aatgaaaaac accaatttat tatacttatg atactgttta ccaggacctg agcaggctac   60
ataggagttc tcacatgat agccaaacct taagctaaat aaatacacia gcatgtgtta  120
cttatcaatc tgaaatactt cttatttaat ctatgtaata taaaaatcat agtaattctt  180
tttattgaat ataacaagaa aatatacagt acacatacag ttcaaagaat tatcaaaaaa  240
cgaacacacc tgtgtaatct ggttaactac ttcaagaatc agaacattat cagctcccca  300
gaaacctccc tcattttcac tcctagtcac tacctccttc ctcaaagca gccactatcc  360
tgacttctaa aaccagagac tgggtcatgc ctagttttca gtttcatatt aatggaatca  420
taatattgtg tgnatggctt cttttgtcaa cattataaga ttacttaca atggtataca  480
tagctgtaat ccggtactgn tataaggcag gctacatcta caacntaagg cttttaacaa  540
tgnactgggt ggtctacatt angntatccc a                               571

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<210> 8512

<211> 529

<212> DNA

<213> Homo sapiens

<400> 8512

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agccacaaac tctcggcatt tgagaccgtt gatttttaat attttcttaa aaaaatacaa   60
aggaaattaa ctctgtaggt caatacaact cagggaaga gggaaaaatg gaatttcaga  120
gcaaagggtg tttagggttat cacattccca cactcctaata acccacaaaa caagaatttc  180
actccatgac acagaggaac attgaatggt agctcanaaa tgttgatagc tgagggtactg  240
aaactaacia aaggattttg gttgtccttg attattctgt cctgtgatga ataaaatcta  300
cactaaagga caggtaagga aaacttatag cagaaaaaag actagatgta ccaaacacag  360
cagtacaaac cactccttgg cagacatgtg cttctaaaag aatggggcag taatcaggta  420

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gctgaactac taggctnctg ncactnccag cccattccca aataaatagt gtggaaatgt 480  
aatagnghaa tagtatttga tcccaccaa aaangntttt aacccatt 529

<210> 8513

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8513

atagaaaata aaattaatac ttgattttat taagggtggtt tatcacaaca aataccaaca 60  
agaagagaaa aaaatctcag gaaaatcaac agcatgcatg gatttggaat gacactatgt 120  
aaataaatgc aatgaaataa aattgacttt tcaacacttg gacagcatga agttcaacag 180  
acaaatccat taaaaaggga aataaaagct caatctcaag gtgaaatttt tgtccatgac 240  
actctcgaat tctagatctg aaaaagtttg ggataaatgg cagaaaacaa cgcgtcatca 300  
cgagatctct aatttaatcc aaagctattc cggaaggcag cagttttccc tatttcttca 360  
ccagcgccct ggggcaaaaag gttaggaata atcggttca ggaacttgaa ctgcccggcc 420  
cctgagtctc cggtaaaca cacctcgtag tggtagctct gggatagggt nccngtgccc 480  
gntcacgtcc ccagatgccc tggaaanggg cccttggccc nagcancgac ccgaaccggg 540  
gccgcctggt cctctggana aaccga 566

<210> 8514

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8514

acttttagtt cacatTTTTT aatgtttaaa aactatgtta acagagcagt tatagaacag 60  
aacttcttat atttctttat ttacaccaca ctctgaaaaa aaaaccaggt tctatttgat 120  
taactatgaa tagcaaagtt ttgtgacttg tgactcactt aaatcaccca tctgaaattc 180

atttacaagg tttttacatt aataaaacag tagtgtggta catatattgg actcagatga 240  
 agtctaaagt acactggact ctagagagtg gattacatac caacgaccaa gattcaagtg 300  
 tttggggaaa aaaatacctt agacagtcta tgttggcgtc aacactaaaa tnaaaggcaa 360  
 acatgcagga ctttcaaagc ttgattagat aatggntcctt tgnntctttt ccttcaaatt 420  
 tgtgtcata attaatatc angttccctc ttncgnttt catagatncc caaagttgag 480  
 aaaatgcagc aattcaattg ggaaaaaac attcttctnc caacttctgg tttcatatga 540  
 ctggggaatg gtatcaaggg taaaaag 567

<210> 8515

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8515

aaaacataag tatgggtata tttatttctc tcaaatgcat acaagacaat aattacacag 60  
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 atatcaatac ccttgtattt ttaaatacag taagtaaaaa agcccccaa taaccaattc 180  
 ttatatttcc tatttatccc tctatacatc caaactttta aaaagttaca aactgaacat 240  
 tatacagaac atataaatca tgtttaaaaa cttgaggttt taaaatcact gcttccccaa 300  
 tatgattcag aaaaattctc atactgacaa gtacagtcac aggttgtaaa gtaagttggt 360  
 ggcggggaaa atgaaagaag agacagacac aagtttgctg tcttaatgtt ttactaatcc 420  
 tgtcagttaa aaatggngac gtcagtgagaa gtaatagttt aatatgagga atgggagttt 480  
 gccttgcagc ttgagacatg catttcagga tttttctat tggactgggc tcctggagcn 540  
 aactngtgnc cnaaaanaaa ta 562

<210> 8516

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8516

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ccaggtacaa cagcagggtt tttccaatt cctcaaagcg ctgcatgggg tgggggcaga 60
gacagaagag aatgtaaaca ttgggttcca cccctggag ctcaaggga gacccttacc 120
cagataggga ctaactggag ggggtgaagg gaacaagggt aaaggtatgg gtcctgggtga 180
gacaaaagca ggggggcctg agaacacaga gcaagggtggg ttggaggga gcacagcagg 240
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gtaaagggga gctntggagt gtaagaatct tgaaacttgc tgacttccat taaccaggag 540
tcanccttg ggattacaac cgggccattt anggacagct 580
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<210> 8517

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8517

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gagatttctc ctactcacct caaacctct aagactgcca aaagctacgc cacaatcaaa 60
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caaagtatgg tccttagaat agcgatcatca taattgtttg gaatgttatt agaaaaataa 180
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aaattatagc cacaagaggt gtctctgcca tccaccagaa tggctaaaat gaaaacacaa 360
aacagacatg tcaagcatcg ataatgatat gcagcaatgg gagttcatgc gctaggaatg 420
ggcaaactgg taaaactaga aaactaattg gcaatagcta ctaaagntgg ccaaagggga 480
tctatacgac cgggcaattc ctttcaaaa atttccccac ngaaaggntt tttttgcttn 540
c 541
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<210> 8518

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8518

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aaagttaagc ctgtttcttt attataagac ttttcagata ctttcccagt gcatagtgtg   180
aatctccaca aagcaagtga aacatgaata gctccctaaa cttacttgac cacagaatgc   240
ttcattctat ctccatggaa accacttggt aaagtctcct actccaactt tcttctccaa   300
caaaactcac ctgtttgtga tcatctgaac tcattttgtg ctcttgctt tatataaaag   360
agaagtcttg tgaaatgttg aagaagcagg gttatggcac tagtaatgat ccaggcctat   420
acaaattggt aaaattttcc attatttttag ttcagaagcc ctaccatagg tattctaaca   480
gtggattgtg ggaaccctagt atgagtgggt gagacatggt tccaaaatat aggagctntt   540
ttaaaaagga atcccttaat aataccgg                                     568

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<210> 8519

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8519

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agtagaaaaa ataccttttt attaattatt aggaataatc cattcatgta atgcaggatg   60
tatgttggag aaggttaagt acagccacat gaatgagggg aaacgtgcaa gaggaacagt  120
ggtagagaagg gggatgggtc cccactttcc acaaactata aacagcaaca tgaacacaga  180
gaatcacaaa taagagggtc tttcctcatg tctcctctca cccattctt ccataatgag  240
tcccagttgg tccctagagg tgccagggca tctggaagtt ctgggctggg agtgggggtgc  300

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agtgagtggc ctcaaagttg tgcagatgct tccgagccag aaacaaagcc agctgccgcc 360  
gtccatctgc actcatgtct tccccacgct tcaaggggaa agtcngggccc cngttctgcc 420  
tggtaggaa cggaggacag acnggacacc agtcctnttt caccttccat cggctattaa 480  
attggggctt tcttcancct gtgaaggang gcttcaacca ctggcttanc actcgaagac 540  
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<210> 8520

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8520

caatagaaat taggtagatc catttat tttt ttaaatacaa gtataatttt ggaaggggta 60  
tttgacaaat tcagcattaa ctgccaactc tatagacatg ttttaacaaa aagcaaaaca 120  
aaacaaaaca aaaaaacaaa acaaggcatt tactcttggc cctttcagta caggcgaagt 180  
gttctattgc atcacaagtg ctagtgatgc agtaacagat ccaaggcat aatattaaat 240  
atgttttttt ccaactgcga tttagttgaa aaataacata atacaaacat atattaatgg 300  
ctatcaagac cagcagtgat ctgcagaata cctagaggcc tacctaatta gaaggttgaa 360  
acttagtaaa accgtattaa agtcagtgtt tttattctta gattaacaat gacagagtga 420  
agatatcttt gattcaattt tataagggtg ggtgggggaa ttgagaggag cnagatttgg 480  
ggaaaactgg cantgggtgc tgagttaant tngggaatgt gggtaaata agcnatntgg 540  
ttaggana 548

<210> 8521

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8521

gaggtgatgg atagattagc tttatttaat cccacattat attcaaaaat cataatgcc 60  
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 ggtagtctcc taacaatcat atgaagacta tcctaaaatg tccttttagta actgtcatgg 180  
 actgaaaagt atcccacgaa gagacaatgt ctactcagat catgtgaata caaacttact 240  
 tggaacatgg gtctttgtaa acataattaa gggctctccag acacaatcac cctagatcag 300  
 ggtggggccct acattcaaag acactgtcct taaaaggtaa tgaagagaag acagagggaa 360  
 aggccgtgtg aacacagagg cagagactgg agtgaagatt gctgctgcaa tacttggaca 420  
 agatttgtcc agaagccaaa gaactccagg aattgcccac ggccccagat tttnggaacc 480  
 gccnttnaag gccggttatg gatcttcctt aaggctcnna agganccact ttgtgacctt 540  
 tganttaac 549

<210> 8522

<211> 414

<212> DNA

<213> Homo sapiens

<400> 8522

gcactttatt ccgccacttt tattgagcaa cagccgtggg gacctgattc tgcactaagt 60  
 gctctactgt gagacatcac aggttgatcat tgctagaggc aagaatctct taaaaagatg 120  
 aaagggcaga acccagtgtt ttttttaatg gttgttattc catgcagaaa cactgactga 180  
 tccagaactg gtaactaagg cggtgatcaa acaggaatgc tttcttctc agtttaggac 240  
 gaagacccgc catgacaatg gcgggaacgc tggagtaaaa cctcacggcg gccagcatgt 300  
 agtttttcgc cagatttgtg gccccacccc caagtaccca cgcgagagg cctccagtca 360  
 tacagcacia agggcatcgc cttgggcagt nnaggctcac tntgtncnna nctg 414

<210> 8523

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8523

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gaactttaaa actactatat tatacaatag taaagcagca gagtatctta cttttatata 60
attatataaa aacttatattt tatattgtta cattgtgaat cacattacaa tttagtctcc 120
ttttcaatag aaagattttc taaggacatg atttggagcc gtccacattt atcagatgcc 180
ttttcattaa ttttttccat ttttgcaatt cttgatccaa actgcatggc ccgtttgggc 240
agaagagcag aggctgtaag accaagttcc acagctgcaa ggcgtaaaag taatttttca 300
ccaattcctc ggggtaaagt caagtttgct ttttcccaa tcggcagaga atttagaaag 360
gagacaacat tttcatccag gaaaggaaat cttgcttctt ttccatgatc accaataact 420
ctgtcatcac gaccaagatt ttaggaagaa attcgacca gtccatcat tatttcttat 480
tcaatccttt cagcccatgc gactggaagc ngacccgatg accagaatac ctggaagggtg 540
ctcattgnnc catttcngng ggactacctt gg 572

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<210> 8524

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8524

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atgctctttt tttggttcta aaactgatgt ggtttcattt ggagttctct tcttttcatt 60
aaccacatca ccgtccgctt ctcttgcttc tagtagtgat aaactatttt gctctttatg 120
gataaattca ttcattctctt ttgtaaccct ttctgtttgc tgcttttctt cttccatctg 180
tttatcatgt aatagctgct gttctttttc ttttctccaa aaagcttcct gtttttgccg 240
gattcgatgc cgtaattctt catcatcagt gtcagatgac tcagatcctc tgtcactcct 300
ctcatcttca ctgtctcctg atccataacc acccagtcca ccgagtccag tgagggaagc 360
cagtgcactg gactgtgccg gctgttttgc aggagctttg tatcacatca acaacaggaa 420
caacatgtta acacaaatag ccncgattca tagtcatgag tctattggna ttggtaaaac 480
tactactaat gctgnntttt ggggagagaa naaacnnttn aaacctacca tcattttaac 540
cagnttaagg ctgctttgaa atataaccct gg 572

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<210> 8525

<211> 596

<212> DNA

<213> Homo sapiens

<400> 8525

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gaggggcatg tcatcatttt aatgatgtga tctttggtgt ttccctcatt agctgtagac   60
tatccctctt cctcccacca caatgtttct atgatgagtt acaaacagaa aggaaatcac  120
attttcatac taaaaacaaa atgatcagag ccttgatttc tccactagaa actacacgta  180
cagttaagag tccacatgca acaccttaaa tcacagactg agacctcaca ttctgacctg  240
gagtctcttc cccttcccca gccttgggct agctttggcc taggctcagg taatactgac  300
accacagggc gctgctctga gggccttgcg gggagaagac tgggtggaaa gccctggggg  360
ctggccagcc tacaccccc actcctgagt gaggacctgc ccactgtccc ttgaccccat  420
cctgtatcag gcaaagcagg cgccccctta cccacaagta agtcccccat tagtaaatgc  480
ccnaagtccc tgtccttcaa gaaatttggg agcctgggcc cgatcctggt gggttcantg  540
gggtaagacg accaaaaaag gttgaanctn tggaaaggct caaagttgga ggnggg      596

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<210> 8526

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8526

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aaccactgta aatttattat gcattaggaa gcttaacctt aaaaccaata gcatagtaaa   60
aagatatgtt atctctgttc atagcagaac aggtttcaaa atatattttc ttttaaattg  120
attcagtcag tacacaatcc tttataaaa ttgtatatat ttttttctgt caataccttc  180
attacattta taaatacaag atttacacag cccccatca aaaaaaaaat taaaaccctt  240
tacaaatata tacatatatt tcatacctat aaaactttca aaggggtgct ctgttaaagg  300

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tgggccctag ttaatgggcc atttactggt gcagcaaaat catataaatc tgtaaagttt 360  
 ctttgccata aaacatcttc aaaaaatagc angacactta tcgnggaacc tcagcttcat 420  
 aaancctaata ttagnaangg acttaatggg cgtantccat gcgatcaaaa aggttaacng 480  
 gatggaataa gatgaattgg aaaccaatgc ctctcagag canttaggcc gaatgtgatg 540  
 gtgagaaaac tttagaagcn ggactggaaa catggn 576

<210> 8527

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8527

acagattgat ttaaaccattt tttaaaccac atgcttcttt ttctgggctc cagccagatc 60  
 tctggggggag gagttgttgg cagtggatg ggaattggga agggctctgtg agaaaatctg 120  
 aggagcttcc tgcctcccc anatctccct cacaagactg tctctctcag ggttgcttgt 180  
 gagaatcatt taggaactgc tgcagngttt tgatgttttc tgaaccctc ccanaaagc 240  
 ccaggagctt gtaattgaaa caagaagtna agggaaagac ccagaatcat catttcccca 300  
 aagtcattag aggaggccag taaatgtgtt tagggggcac aagttcccaa acgccacccc 360  
 accattcctt cctaggaagt tctcaaaggc cagcaccaag aacctgtccc tctcttttca 420  
 tctcctctc cttctggtct nctcctgggg cttggaaaac cantgcttg aaanaggaaa 480  
 ggnaaaagga ggacttaaaa tancatgatc naccgttctg ctttccgggg tgacaangga 540  
 ttgccaacc cttaaagggt tgcccgaagg g 571

<210> 8528

<211> 508

<212> DNA

<213> Homo sapiens

<400> 8528

gagagttaga acaaagaaac ttaaatgttc tggctgacta tactatgttg ataggctgac 60  
aattactgca tctatactga aaatacatag actcttttcc ttatcatgag tccctaaaca 120  
atacaataga acaactatit gcatagcttt tacaatgcat gaggtatitit aagtaatcta 180  
gacataattg agagtataca agaggatgtg ggtaagttac atacaaatat gtcattttat 240  
aaaagggact ggacatggct cacggagtgc tggaaccaat acccagcagg tatcaaggga 300  
tgactgtctg gaaagaaact gaaattactt aagggttttac caagtgttta cattcacagg 360  
gctatctcca atgggttctg acaagtatct gaaatgaaat aaaattaata aangctttcc 420  
acattccttc cttttgagag aagctntggg gctttttaang ctatccaggg actgggnanaa 480  
ccaatntttt nccaattctt catcctac 508

<210> 8529

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8529

gtagacgggc taaggtttat ttacttactt aacattttaa aataattcat ttgcttcaac 60  
aacatggcag acaatcaaga gtactattga aacataattc agagagggtc aggacaggaa 120  
agatcacaac ctcattcctg aggtggaatg aaagatctaa gccaggcctc catcctaggc 180  
caggctcctc cattaagcag agacaaccaa aagataagaa agccttggcc tcattcccat 240  
caggagatag cctgaactgc tcacaaataa gaaacaactt gaccagactg aggactgggt 300  
cctgatgagt caataggaaa gtcagttggg tctctcttca gtaggtgact tagcaccctt 360  
ctggagaaca tagagtagta gtctggacct ggaggctaag gcccacattc aacaaagggt 420  
accttctttt cagtaacgct ttggctcttt ttccaacagc aagaaacctg aatccangg 480  
aagtcattta aaaaaccctt ttngctggac ctggaagcat ttccaagnca actgggggtan 540  
aatnaggcc tccacnttag ggggn 565

<210> 8530

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8530

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gactgttgatg attttcagca ggtacagttt tgattttatt gcaaggcaca caatcgata 60
tacaatgcat aattatcatc ttttaaagta caagataaaa atcatataca ttatagtaaa 120
gaacatatga gtatatcttt gtttcagaga agaaaattgc ctttaggaag ctgggttata 180
ccgttttttg atgtgatttt cgtatttata ctgaatcatc cgaacagctc ttggtttaga 240
aataaatctc attgatagga cacacaacct ttcacagctt tcactttaca atgttccaat 300
ttaaagtcag ccagtgtgct ccctgaattt gcatgagtca tcgtatttca tcccaggact 360
agatgaaaca cctataaatt gtctgacaat agttatacac gttaagaac tgnatttctt 420
agtaatatat cacagaatag aaccattttc ttaagatttt atgtgactct ttattgattt 480
tttttctcca agctattttt ncaaagatg gattaatttt gggattancc tanagtttga 540
cttaaactcg aaggggctct tnna 564

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<210> 8531

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8531

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aaaaccaaac caaatcattt tattgggcaa tttccttnta ccanaaaatt actaaaanta 60
taaatattaa ctctntaaaa aatactcaga atagatctgn aatcttcctc ctcttcctnc 120
gaactggagc caatcttntt ntttaaanc tcatggattg catacatgta tgtcttccat 180
atnanccaca tacacaacat tcagatacac ttccctttgt gcagggggat acnccancct 240
cctgccnggt tntggaagct caccttataa tntaccagga caaagctgtg tgctgagtag 300
gaggttatgg nggggttggg gagtaacaag gagataaaag accttggggg cccaacttcc 360
ttatgnggac agagaagata ggtcctttac tcctctncat taccctgcc tctcatggac 420
tgggctaact gaaggccaan ctcccaaaga agcttggact cactgngtgg gattactggn 480

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ggtgtggctg tcagctcagc nccggaaggg caaactttna aangggctgg gaaccagg 538

<210> 8532

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8532

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 ttatgccagc agttaaatgt gaatcctact caagaacatg ttccactggg agttttgatt 120  
 aaactctcta ctctgattta actgttctct cttccatttg aaaaatcaga gtacttttta 180  
 atcagtcttt gctaaacagc agctattgct attcaatgga gacgggtggc accatttccc 240  
 ctgcatcgtc tctcctacgt aatcagtccc tgatgaactc tcttcccata aaaatccctg 300  
 tgtcctaaag tcatggcgtg ctctatttca tggtcatttg tagagcacag cagcactgtg 360  
 cctgtcagga aaagtgtgtg ctaactgcaa taagcatgat gactgccatc acggttttgt 420  
 tattctctgt ccacctccat ggtctctaaa tcagacaatc tttaatctga aaaggcagtg 480  
 tccttattcc tccaggaaac tggatagaaa cgctcctcat ctaatggaag cagccctgnc 540  
 atcttactgg atctttttcca gaccncaggg gaanggc 577

<210> 8533

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8533

accagtaaaa tagttttatt tgattttaaa atagtcatca atgtgaaaat ttctcaaagc 60  
 ttaagagtaa cagtctagag ccaagggttg gagtgggggc caggcctcac acagagccca 120  
 gcttgaggcc cctgagcccc accctccttt ccagagggag ggaggagaca gctgaggggg 180  
 ccctgaatca gtcctctccc tcgtcccca ggccagctgt gccaggcccc tggagggcaa 240

cagctcatgc ggaggactgg ggggggaagc aaacaggtag gaaacggaaa tgagggttaac 300  
aattacacca tcacccccaa aaaaaaacia aataacaaaa cttgtgacta tgaaaggatg 360  
gaagatgaat actgataaac tcctcagctc ccataaaaag ccagctctgg gctgggttgg 420  
gctgattgga ggaaaggctt tgagacccaa ctgcatgtta cctctgaaga attaatatc 480  
tangaaaaag ggaaaaccat gaggcaagct tctgaagtca gttacgcan tnacaaggcc 540  
ttggcattgg ccacaacctg ccccttct 569

<210> 8534

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8534

gattnggatg aaatatitaa tggaaaataa aaacatatc caaactgata aggntaatct 60  
ggagaaatgt tttagccata aaacccaaaa ccggaattga gtaaataccg nggttcttag 120  
ttaagtaaac acctccatct tatgtaaaca ggtttaaaac aaaaaaata ttattttctg 180  
atttggttgt gtaatcgtgg gcctcagagg aaaagcttcc taaccctttt gtcatatata 240  
tatatatit tttgagctt gctttgtggc catgctggaa tgcagtgggt caatcttggc 300  
tactgctac ctccacctnc tgggttcaag caatnntcct gcctcagcct cccaagtanc 360  
tgggactaca ggcgtgcacc accatgcca gctaattttt gcattttgta naaatgtgg 420  
ttcaccatgt tggccaggat ggtctttgat ctcttgacct cgttatctgc ccacttcagc 480  
ctccaaagtg ctgggaatac naggtgttaa acaccggacc cagnctcctt tggcatntct 540  
tganggaccc tcaaaaagan atccttgggg ggaac 575

<210> 8535

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8535

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aaaacttaag agttgtttat ttctgaaatt tticatttag tattttcggg ctgcagttgg 60
ctatgagtaa ctgaaacat gagtaacaga aaccatggat gggggaggat gactggagtc 120
tgaggtatcc taccctacat ggcctgggaa tgtttgttct catgctctgc ctggcagtta 180
attgttcaca agtgtcccca taagtaactg tcgagaagat tctcacagga gaccacgtgg 240
gttgccctgaa gaagccagag tgaaggaggg ttgaaatcaa cgcctttaga gtcttaggaa 300
taaaagttaa aaagccccag agaaatgttg tcctttgtcc acggcacctg cactaacccc 360
tcccagaaag tgggcatgca gtttcccagg ccagacgagt gttcgttgct caccgaagac 420
cagtgtttac tagcaggatt gtcgccagaa gcagctgcat tctccccgga tgcagacctg 480
cccgttggtg gggactctgc tnacacngaa catggccggg acacctgtgn ccgttggtgac 540
cttcancact tttggacatn tcgctggggg gttgggnaag 580

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<210> 8536

<211> 590

<212> DNA

<213> Homo sapiens

<400> 8536

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atttcaaaaa cagggatatc tgcatttaat ttcatcagc aaatcaattc cagttaactt 60
accatctctt aaaaatggga gaaagcaaac ataggacgtg aaaagttaa gatgcgtgac 120
atactggaga gtaataagac atactggaga gtagtaagtg cacacgtggc aattaagggt 180
tgtaatttag atgtaacaca agaaaaaaag taaaattact gtactttatt gctgtatcta 240
tgctttccca gtatagctat aatactacaa ggagccacag agtgccacct tctggtttta 300
aactgtggca ccttatttct tttgaaatgt cactttataa ggtgtatgta gaaagcaaca 360
gcagcagtta caaatgttg tctgagtgat tctgagagct caaacaagg atccgcgtat 420
aggctgaaga aaaagacgtt cagttaacag tgcgcgtgtg agaacttta cacaagtctt 480
cangtggat tcctgtgtaa acctagtag agatgccact nacgngacc aaaagtnaaa 540
atctttttan ccgntacaag ttaatgaggg ggctggattt tgcaaccacn 590

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<210> 8537

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8537

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gagactgagt cttgctctgt ctcccaggct ggagtgcagt ggcacaatct cagctcactg   60
cagcctccgc ctectgggtt caagcgattc tcctgcctca gcctcctgag tagctgagat  120
tacaggcaca cgccaccatg ctcagctaac ttttgtatth ttagtacaga cagggtttca  180
ccatgttggc caggctggtc ttgaactcct gacctagtga tccacccgcc tcagcctccc  240
aaagtgtgg gattacaggc atgagccaca acgccaacc ttttttttt taaacttta  300
ttaaatgcta ctttctcata gacttcccta gactggtttg caatctaagg taataggaaa  360
caaggcattg ggcattttga agaaactgca ggtaagcta tggtgccaag cagaagacta  420
aacactgatt tgagtgtcaa atcttcagca cgttctggga tagaggcagg ttctcaaata  480
gttctanng gtccttntct ttcactaant aaattttcct tttttgggga atcnangcag  540
atacaaacc ctggatggcc tttttggcna a                                     571

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<210> 8538

<211> 596

<212> DNA

<213> Homo sapiens

<400> 8538

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ataaaccaag aaagtaaatt tatttaaatt actaaaatag cttttaagt catttacaga   60
tcagctgcta taattattht tcctgaaaga cataggtaac atattactth taaattactt  120
gggtcaatga aacatttaat aaaaacattt gtttctctat ataatacgta tgtataaaat  180
aagccttttc aaaaactctg gttttcataa tcctctataa atcagatgat ctgacttcta  240
agaggaacaa attacagtaa ggggtataca tttatgaata ctggtagtac tagaggaaag  300
acgttaaacc actctactac cacttgtgga actctcaaag ggtaaataac aaagccaatg  360

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actgactcta aaaacaatat ttacatttaa tggttttagt acaataaaaa aacaagggtgg 420  
 atagatctag aattignaaca ttttaagaaa accatagcat ttgacagatg agaaagctca 480  
 attatagatg ccaaggtttt actaaactac tatngtagg taaaggaaat ccatttnaca 540  
 ccctttatat aaaatcncta tcttggttg nggcncctct taaaagntta ccngct 596

<210> 8539

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8539

ctagtttggg ttagattata atcatctgaa gcacaggata accgagaagc aaaattccat 60  
 tctggtacaa acacccaatt tctagaaaag agaaaggaaa agaagaaata cgacgtgagc 120  
 ttttttgatc agaagactcc atgaaatgag agcgggtggt atatgaatcc acgtgatttt 180  
 tcaagtcttc ctgttgtaga gtcacaaaa tgaccagggt tgtgctgcaa aggagccagc 240  
 accatgtggc tactgctttg attgttctca gatgaatgtt tatacaaaaat aatatcttat 300  
 cttcatttag tttataaaca tacacagtgc tgtccctttc aaattaagga aaaaaaacca 360  
 cacacacaaa tactgcaaag tagcaaaaata caaaggaaaa caaagctact ttnggttttt 420  
 ggcaacatta aaaaagaaag aaatntaaaa agcaatgtgg cattggtccc tattcattaa 480  
 aaaaaaaaaag ggacttnggg cncnacanaa tcagaattag gttnngnttc taaaaattca 540  
 aag 543

<210> 8540

<211> 593

<212> DNA

<213> Homo sapiens

<400> 8540

atttaaaact tttattaacg cttgaagaaa aataatgcaa tgtgacaatg tacaggctct 60

gttgccctaaa tccgtagtag aaacagatat tatcacttag caagctcacg tggcgccaat 120  
 tctgagatca gacggggttg ttcctcctta ggaagtggcc actggaagca ttgtttttcc 180  
 atgctatttc cgtgaagcct tttgcttggg tcgagtttaa atttctccct ttgtgtgagt 240  
 atgactatag ttctggcctg gtgttttcta tttatttagt tttagatgtc agcattttac 300  
 tatacttggg cctctcactt cagaataaca gggctattta ttgatacaaa ggagagggtg 360  
 tcagatcatc ttgttaagat gcagagctca aaataaacac taaatcttta tttggagatc 420  
 cacatccttc ctcaaaggaa ggctcatgag taaatttgta tgcagtatna agcccaagta 480  
 gaggggtgtat tttaatgact actttgctta catttttagat tnggccaaat gtctcaatca 540  
 atgcttgcac gaatgggtggc ccttcccang tttaacccaa anacctggg caa 593

<210> 8541

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8541

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 aggccaattt ctttcattaa catagatgag aacaaaatct aaacaatacg ttatcaaaat 120  
 aaatccagta ttgcatacaa caaataataa tgggtgtattt cagcaagttg tggtaacaaa 180  
 ttgaagtaaa tcaatgtact aagccacatt aacagaacaa aaatgatata caattgtctc 240  
 aataatttac agaaaagaca taggtagaat acgagttttc attttataca aaaacttgta 300  
 gtaaatatac agatcagaac ttcctaaatt tgatcccctg catcaatcaa aaaaaacctg 360  
 catcaaatat tatgcttaat ggcaaaatac tgaaagcgcc ccctatccac ctcaagacct 420  
 gtcacagtc aaagatgctt actctacca ctgggtgcat cctagtctga gtaactggtt 480  
 aaaacgaaag aactgtctgg ggcgcggcgg gtcacatntg naatccagcc tttgggaaaa 540  
 cnaggccggt ggaccttgcg gcaagaattc naganengcn ggc 583

<210> 8542

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8542

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cgtaaacaaa atttaataca accatatagt caagtaataa tggttaaaag acattttatt 60
agatacaact tttaaaaaat taaactatgc aagaagtata tttaaacaaa acatgtaagt 120
aagtattcac gtgctacaac ttaactaaga acaattaaat acaaagcatt ctttcacta 180
tgaagactct ggagcctcta attgaaagca aatgacctta ggtctatact agttgtaaag 240
cagattatac ttttgttcaa ctctaaattt gtattgtctt agagctcaa caactctcaa 300
taaaaattta aataaagaaa ccttggggga ggggtgatag gggaagggga gagtaagtgc 360
ttttcaaaa aggtaaatga aaaagcctga agagggaaaa aattgncata agtatggaac 420
aaaaataagt atactttttt gacattcgat gtagatactg naaatgaatt tcccnggttt 480
aatcaatgta ggatagatnt ttggctgaat ntttaaaaag cncctaggnt caaaant 537
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<210> 8543

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8543

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gccctgtctt tgccctagtt cccgagtgtc cttcaccccc atcttccaaa tcattctctgg 120
tttcacgggg aagaaaaaac ctagggctgc tgtgaatgtg ccctctcagg tccctgagtt 180
ggccccaggt agagctgtaa gagatcagga agagggcctc cctgcctgac ggcgatgac 240
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agaggtaggg gctcccaact gggcagcgag tcggcgctct gcagccagag ctctcttctc 420
tcggtcactg agggcggaac atcgccgctg ctcttctngt tcacgcttct nctgnttctg 480
ntgcctctgn tgntggtcct tcccgttgcc gccggctgct ttggttcctt ttccgnaa 539
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<210> 8544

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8544

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cagnggtcaa actgagcgag gagtgggtga ggtctcctca nagagaggcc gccctgggcc 120
cacccatcag ggaggcatgg gcgggagctg anaggccccc aagacccccc gccaccacca 180
cccacatagc ccaagcccag ccaccctggg ggaccagga ggaggaggag gagaggaata 240
gggcaaggcc ggcccgggcc aacggntccg ggcctagcaa aggcacctnt ggcagccgag 300
gctgggccag gctcaggctg tgtggttaat atggccggga aggactatgt acaccttagg 360
cctgcanctg ggcactaccg agcccactgg gccaggcttg ccgctgggga actcctgcta 420
atgggaagtt gatatacccc tggacccac aagggtctgg gatgtangcc cntttgtgcc 480
cgacttttta naaggcttgc ctaatgggct ttncaccca anaaacttgg tagaatcccc 540
ccaggntgga ccn 554
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<210> 8545

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8545

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aacaatgaga catatgcagc tttatttaat aatccgtaaa aagtcatact ctggcagagt 60
gatgcattcc ttatctcagc agaaagcaaa cagtctgtct gaaaagcccc ttccaagat 120
ttggaactgt gtaaccctga gcttacatct caatgctccc aagagctggg ctcttgctat 180
gtggtagttg gtctccacaa ttctctcacc ctccagcaat actctctgtc tggctgtgac 240
tcctcacct aacagtagac atgaggctga aaacaacttt acctggacag ggctaccct 300
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acagattggc cctttctctc ctacaaaagg gagttcatag gattaacaat ctttctaattg 360  
gctgggagca atgactcatg cctgtaatcc cagcactttg ggaggctgag gcaggtggat 420  
cacctgaggt cangagtttg agaccagcct ggccaacatg gtgaaacttc atcctactaa 480  
aaatacctaa ctttaactggg tatggtggca agtgcctgna anctcagttc tcggaggcta 540  
agccgganaa tnnttgaacc cagggggn 568

<210> 8546

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8546

acatacatat tcttatattg\_tgtaataaaa gatttctgaag tccattactg gctagaataa 60  
taactagaaa ttgcttaata ttactataca ttgcatttga acttaatctc cacagtaaca 120  
attaggtagt attacttgga tttcatggat gaagaaaacc aagatacaaa aagttcacac 180  
agccagtaag cagatgagcc tgacttcata gtcatacata gcctgaattg agtcccagca 240  
ggagcacatg ggcatggaca tctaccagat ttgggaactg gcgtagccaa gcaagaaata 300  
ggagacggaa tcaggagtta ggattccatg cttaggacca tcccagatgg atggctgcct 360  
ccctctggga gctgcactct tctgaggttg caggcatcca gggccagggt gcttctgtga 420  
ggtgtgccag cacgtgccac tctgcttgga tcaagctatc atggtctgan ggctgcttnc 480  
ctcancataa gaaggggctt ctattgggaa gngtaggctt cantgnaggg nccacttgag 540  
cctttttttt agagacag 558

<210> 8547

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8547

agaagtactg atttttattg ttatacaaca catatatata attgtttccc caaaatatgc 60  
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 taaaattcct agcacaatac agaagggtga agcttcatta caactggtcg tggcaataat 180  
 ttgggggacg tagcatcaac ggatgagaca acaaaagcaa gggaatacac aaggtactga 240  
 atcagtgtat gaaaaatatc ccaaacagac aaagcagaac atggaataga tatatgcaca 300  
 ttgtagtatt actcacaac atgttacctg gaagcaaagtg tacccttaag gatgagtaga 360  
 ttcagcaaac agggcacgta caatcactgg gatagcattc agccttaaaa ataaggaaat 420  
 cttgaaaagt ctaccataag gacaaatctt caaaacattc tggtaagtaa aataagacag 480  
 tccaaaangg aagctgnnta ataccctcat gtaaaaatta gtcaactcaa ggaanccagn 540  
 gtcgtantnt na 552

<210> 8548

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8548

cctttagaca tttacaggta tttatttgag taagagctca taaaatatat ttttataata 60  
 tgcacaagaa aaaatacatt tgaatgaata aaaaataaaa tgacaggagg tgacagaatt 120  
 tagtgtttat aaatgaggtc ataaagaact ttaataattc agagaagaag ttcaaagtgt 180  
 atttaaaagt tgagaccctg ctttacaata ttttataatt ttaaaaaaag gcgttttaaag 240  
 gtgatagggtg acttaataat tttccacttt caaaatgggt ttctagacac tgttggttcat 300  
 gaaccaaaaa caaacaaca aacaacaac aacaaaacc aaacactttg gcaagcaaag 360  
 tattattagt catagcagct tcataacagt ttactttttt aatataaaga tttttcaatt 420  
 cacacttgta gggagtagaa aaactaatat gctaagctctg taagctacgc agccaaaaat 480  
 aatgacctaa tgaagcccga atctgngaaa aggtgcacca cactgcttat atagtancctg 540  
 agtaaagtga ancctgggct tattaacttt n 571

<210> 8549

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8549

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aaaccacata ctttatttga tgtcaacatc aaagaaggaa tattttaaaa agcacataga 60
aacccttaag ttagtaatat tttaaactgc atgaaaaaca tattatttta catcttgtca 120
tactgtatat acaactgtac ataaacttct gcatttcaaa gcacttgtca ttataaaagt 180
gaaaagtttg aaagtgctaa ataaacattt cctaattatt attttaaaa acagcactct 240
tttggagttt atctcttctt tgtgcttata gttgatctgc aaacatttca agtcaaagtt 300
tctggaaact tctttaggaa acatctggag aaaatcatag tagacaaggg ctaagtgcag 360
acataagcag ctccatttta taaacaaaat ttcgaccttc cattttattc cactgaactt 420
ctttgaatgg cccacgaaga tgactccatt tggatcttg naaaacatca ctttttggga 480
aggctttaca tttgntccg aggnaactgg accntaatct tgntggcnct tttanggcc 539

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<210> 8550

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8550

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aacaggtaaa atgaataaca tactttattt aatccaatag agccaacata ttatcattgc 60
aatacacaaa ggaaaagtta ttagtgagat attttacatt attttttgaa gtaggtattt 120
gaaatctggt atatatttta tacattgagc acatctcaat tcagactagg catgtatgaa 180
gtactcaaca gacattgggtg gctcctggat accatatggg acagccagtg ccattctcat 240
ccttgatatt tgtttctacc ctccatgta cctcttaatt tcttttatag ctggttcaaa 300
aaacatattg cacctctcta ccaaagtcac agcagctcac tcaacagctg tttgttcctg 360
cgcataaaga gagtgtggaa aagctggaag aaatcatcct cttcctttaa gtgctttata 420
ttggatcatat tttctctttg ggggnntctt tctattctga gagaaaatat gtantgggat 480

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ggttttctct tcccactact cttttggttt tactgcaatt aattggaagg acgaattttt 540  
tttatgggtca attgntctct taaaggngnn 570

<210> 8551

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8551

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ctaagcacac catgtttaga tctttcagat ctttctgcag ttttaggtta tttctacaga 120  
ggtaccttta agtgaatgaa taccacattc tgtaattcct gaaaatatag tacagagtga 180  
aatgatttaa atataattta ggcacatatt gattatgaaa atagattatc tctcaataca 240  
atacttctct gtcttggtaa aaataataaa gcaaagaaaa tagttcattt ctgaagttgc 300  
tttcttcac ttgtaaaggt ctgatctcct cccactatgc atatgtaccc tttactgtta 360  
aggaaagctt tgcatatgta gatatagaag aataagctac gtaaatacta aagatatgnc 420  
attctcccaa aggagacaca ggtgggtttc aatgattcct tggcttatgg tgatgagtct 480  
gnanaantca gaanccantt ggcccngctt atatcccggg tttgggggan aaaata 536

<210> 8552

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8552

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taatttgtac aatccaacta cattacaatt cacagtaaca tacactagct ctaacctgcc 120  
ttggatacaa ttaagtctcc tcaacacact attttatcgc caaacttaca ttctggcttt 180  
tataatcatt ttgcaacacc tggtagta tacacctata gctttgccaat agaaatgccc 240

ctaaatgccc ttcagagagc agaggtgaat actttctcat gaagaaacgc caacttttct 300  
aagcgagttc gtttcagtag tgggagccat tcccagtagg ataactctac cacacggtag 360  
ccaagccgag ccagctgccg cctcttcata ttgtgcagtc caaggagatc cctggagcca 420  
tagcaatact ggttcctggt tgtgaactga acagccagct tcattcttgg ggtctgcatg 480  
cangctgcgg ggcacaagcc aagccatctt caatggccct gattatctgn tacattggaa 540  
aaggaagccc ccanangtac agtggcttat ttcaact 577

<210> 8553

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8553

gtcaaaaagg atcaaacact ttattcatct acacataaca tatataaaag caagcaaaat 60  
caggatgttt tctcagcca ccctttccac attttgtgca gttttagtga actataaatc 120  
actgacttct tcaggcctaa aagagaaaag atgagaaagt aagaagatgg aggcttggtg 180  
agtggatgct cagagtttca gtgacattct gagcagactt gtctttggag gagggcagtg 240  
aggggctgac ccgtggctct aggagaccag ggagctgaag gtgattaaag gtcactgtga 300  
tcaatgtagg gggaaatgat tctgatttcg gcattttccg atttagggct atggatgccca 360  
acggttccta agttattggg ataagtgatc cttttgagtt atgaacatat tggcagcctc 420  
tgaatttagc tctttcaaaa ggggtaggac aaggataaga ctctgtatgc cactgggtcc 480  
ccgtctnttn agcctnaant tcaacccac ttactggctc tatggcctgn gnaange 537

<210> 8554

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8554

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gattttctgt atattgatct agcctgtgac cttgctgaac ttgattaatt ctattacact 120  
atgatttttt gtgttggtta gacccttaca caatcaaag aggttaaaaa aaattgtcag 180  
agtggcccca gaccaacaac aggatgacag tagcctttgc ccatacagag ataaaattta 240  
gtttttgcag tcctttccca tagagattgt atggcagtag ccaattctat ggcctactgc 300  
catacaacct gaactgaagt ccagaaagtt taggtgactg ggccacagag ctaattactg 360  
gtggagccaa gaagagaaat tatatcccta cctccttgcc cactaagctc cccattccag 420  
tggggctgct ttctggctct tttccatgat tgggcttttag tagctgncat ttccttcagt 480  
gtncagaag tattttcttg gcctttcagt aaagcttccc aaagtttgct gngttccgcc 540  
ttaacttgta anttggcctc cntgntaaac atttttgaaa acg 583

<210> 8555

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8555

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tcctcctgcc ttggcctccc aaagcgctag gattacaggc ataagccacc acacctggcc 120  
cccatattcg agcctaagt ttctttggga aacaactgag taaagaggat gccaaccccc 180  
aaaagaaact gaagataacg ttctgcccag tgggaccgat gatcatgcta taacactcct 240  
tttgtctcca ggaaaagctg aaagcagctc tagctaacca acccccctct aaaccccctg 300  
acatacatag ggcttccaac tccagcaagg gggccaacca acccactcaa atcaaaaacca 360  
aaaactaaat cataacagta aaaatatgac cagcaaacaa cgaaagagga tatctctggt 420  
cccacagttt cctacgggag accagatggc tgatttctgg cattctctgn cctggagccn 480  
gaaaattacn ccaatntccc ttggacntaa ggtanacctt gnggaccaa gccaa 535

<210> 8556

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8556

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atgtttaaat gttgtttcct taatatcatc aaatatccag ccagagttca aatttgcttt   60
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ttcatacatt gcactggatt cacacgtctc aagtatcttt caatctccag gcttcccttc  180
ccttcccttt tcctcttgta atgtatttgt tgaagaatct aggtccctct gtagtcactc  240
ctctcccat tcccagcccc tggtaaccac ttacctgttt tctgacccta taattttgta  300
gggcccactt tgtactgatg tacttctgac taggtgtgtt tatgttcaag catcagagcc  360
aaggcccaaa cctctaccct ggccctcctt ctgctgtggc ccaactgtac ccagagctgg  420
gctctccgt ctcctgcct gttaatccta gaagtgggtg ccgaggaggg agaaacagga  480
agganggagt tgggganggc aacttggtac atggacaaca aggctgttcc acttcancaa  540
caagctttgg ggtaacttng ntccaaattg a                               571

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<210> 8557

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8557

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gaataaactg catgtttatt ccaggctcgt ttagctggac gagcagtaca gacagggctg   60
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cctaattgtc gcgatgttgg tcttttgaag gaggcccca cagagccgag cttgcttggt  180
tatctgggac tgctgctcag tctgagtagg ggagggtaat gaaccagtca ggcctcctcc  240
tggaggtgcc caacactggc ctagtcccca aggctgacga aacatggtct ggcctgaccc  300
caggacgtgg ggtgaggagg aacactgggc ataatatagt agcggaaaca ggcaagcctc  360
tatgggtccc ttccccttag aattttaggg tagggaacga ggaggctaca gactaaattg  420
cagaactatc tgcacctggg ccttgagctt ttncctnact nccagtggag ccattctnng  480

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gactgagttc atgangacta ccanaaggtg gcaagttcaa tctggncctg gctt 534

<210> 8558

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8558

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ctttctgctg gcattgggtc tatttttcc tcttttttta ggtttttgag gtggaagctt 180  
aggttactgg ttgaagactt ttcttttcta gagcatgcat ttagtgctat atattttccc 240  
atcagttctg ctttatgtgt ctacaaaatt ttatgttggt ttcattttca ttcagttcag 300  
tgcattttta aaatttcttt tgagatttcc tctatgacca tgggttataa aatattgttg 360  
ttcagttttc aagtgtttgg tgattttccc attatcattg gtatttattt ctagttcggn 420  
tcttttgngg ttggagaaag tacttgtagt atttcagttc ttttaaattg gttgangctt 480  
ggtttaatgc ccanggncta tccttaaagtg gggggtccgn gagcccctgg anaaactggg 540  
ntcngccggt 550

<210> 8559

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8559

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ctctttttgt ctactaagat aagaagtctg ggctaggctg aaaaactcag aatccaggtc 180  
tggggtttcc cagtactatg ctcccatttc ccagtactgt gctcccattt cccagtacta 240



tgctcccatt tccgagtact gngaactccc ctttcccagt actgtgggct cccatttccc 300  
 agtactgtgc tcccatttcc cagtactgtg ctcccatttc tcagtactgt atgcccattt 360  
 cccagtactg tatgcccatt tcccagtact gngctcccatt ttctcagtag tgtactccca 420  
 tttntcagac tgggctccca cttttnagta ctgggctcca cttccaagac tgggctccat 480  
 ttccaatact gggctccatt ttgcaagctt gganccccatt ttccaagacc ngggttccca 540  
 tttcccagac tgggc 555

<210> 8560

<211> 419

<212> DNA

<213> Homo sapiens

<400> 8560

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 tggncacatg gattggctta aaagggaac aagaatactt naacatttga tcaacagtag 180  
 gcagttgctg gacatttttag aaaaaggaga aatccatttt ttgaccatgg ctaaaccatgg 240  
 ggaaacagca tcacattttc ctgaaccacc ctaatcccgg cccctcaaga tccaccaggt 300  
 ntgaacccc aaaccccagt cacatacatt aaatctacac tttattttt tagntgtaaa 360  
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<210> 8561

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8561

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tgtgatgaaa caattaaaat cccatgcac cctggccctt cctccacgtt gcccctcaga 180  
 atgcctgcag ctgcagcagg caggaggcag caggagaacc cgggctgtgg aaggcccctc 240  
 tgcctctctg ggaaagctgc tggggaagcc agaggtcaca gtgcattgga ggcctggctt 300  
 tcagccactg gccaggccaa aatgaaacat ctgctcaagt ctccccaggc accttgctgg 360  
 gggtagtggt gagaaagaag tggagaaaac tgatgctgga ccacaagtta tcaccctgta 420  
 ccttggcttt gaagtggccc ctgctggtac aggaacaggg tgagagtnaa agttaattaa 480  
 ttaaagccac atgctttaan gnnaaaaggn nccn 514

<210> 8562

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8562

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 caaaaaaact tttaggcaca agatttttaa aataaagaat gagacaatga aaccaagact 180  
 ggaataacag aagtaacaaa aactcacatt tcctaactct tcaattgggtc ttgncttcca 240  
 acctattggt taaggcctga gtttcagaaa tcttaccttc cttgccaaat agaaacatcc 300  
 actttggctg natataacat tatccacata acacactaat tctctttcaa aataatgnaa 360  
 taaatatacc attcatacac acacacacac acacacacac acacaccctg ctgaaccagc 420  
 ctntcaaata ggaaaataag gattttggaa ttttcaaggt ttcctnccac ccaagcacat 480  
 tcccnent ttaccctnc nttggaaaaa tggg 514

<210> 8563

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8563

cattggaaac ttaactgatt ctttattcca actatcaatt ttataacttg agcccaatta	60
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ccccacata atgccttcta acaacatctt cactaacttg aaggtgatgg gctaaatcca	180
cagctagagc tggccaatct tggcttttcc caaaaggagt ggggtgtggc tcttctgtgg	240
gatctttgac ctttgtggct gaatgttggg cctggacagc tgcactgaca actttcaata	300
agaactgttg tcgtacagaa ataaaatttg gatccatttc cccactaggt aataactgaa	360
ttgaagttag gtctttgaaa aatgcatttt ttcccttact gtcaaaaagt gaaagtggct	420
tcacggnctt cagagaaaac ctcactgactg catacaagat ggagcacagg atggantgg	480
gcttcaccag tgggtagtgg gatgtgcttt tggttaaggg ccanttcct ntggaaattg	540
gncctttcac ggaaagn	557

<210> 8564

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8564

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caatttcagg ttcatcagct ttacaacta ttttcaacgt aagaatanaa gctattanca	120
aataacttct atcaaatnta aaaggaggc ctaggatntn caacatcttt gctttataaa	180
gatgnccta acatgaacta acttgtcaac tttanactnt tacagcagct caaacagttg	240
caaaanfaat gaacatcagn gatttctggc aataagctctg tcagtntaa nagagtaa	300
aacacttttt taaagctaca ttctagtctt tcttcataca ctacacataa gaaagaaatg	360
caggttcaaa aataaatcac ccaaaagctt ttccatgtcc ctgagactta accttcagtt	420
caacccaanc angagataag ngtnctcaa aaggccttct gaatctcaag aatctggttt	480
ccaacttгна cttttntaa ggatagncaa taaggttcct taaaaa	526

<210> 8565

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8565

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at tt t t g a a a a g t a t t t a c t t a g t t t a a a t a a a t t a a t t g c a a a t a a a a t t a a g c t a c a a      60
t a t a t a g c c t g a a t a a a a t g a c t a g a a c a a t a c a a c a g g a c t t g c t t t c t t g c a t t      120
a g t c a c a a a g c a t g t g a c a a t c t a g a a a a c t t c a a a a t c a a t t a c a t t t c t t t g a a a a g      180
g g g t a a c a g c a g t t a c t g a t a c a t c a c a a c t a a t a a a c t t a t a a t a c a a g t t t c c t g a c a      240
t g c a t t t c c t g a g t g a a c c c a a t g a t c a t t t t t t a a a c a a g g a a g t t t c g a c a g t t g a      300
a g t a a a a t a a a t a a t t c a t g g c t t c t a a g c a a c a a g t t t t g n t t t t t a a a a c c a a a a g      360
a a a a t t c a g a c a g t t t t g t a a t a g g a t a a a t t a a a g g n a t g c t c c a c a t a t a a a c t t t      420
g c t a c a g c a g t t a a g t a t t a t a c a c t t t t c a a a c t a a a g g g a a c a a t c a a a t t t t a a a      480
g g a a g a t c c g g c t a a c t a a a a n g n c c n g g t t c t a c a g g g g c a a a a a a a g a a t t g g t g g a a      540
g g c n                                                                                                            544

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<210> 8566

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8566

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a c a g a a g t a a a g t t t a t t a c a t t t g a a a c a a t a c a g c a g a a a c c t c a a a a g t t t a c t c a t      60
a a a t a t a g t t t a a t t c t t a c a a a t c t t c t t t t g a a a a t g c a a t t c a t a t a t g c t g c a a c c      120
t c a g a a g t t t g a a t t t g a a a t g a a a t a t g a a g g t a g t a g t c a g g g a a g t c a c a t c a g a g t      180
g c c t t g t c a a a t a t c c a a a c a a a t c a g c a c a t a c c t c t t c c t t g a t a c a g g a g g a a a a a      240
g t g a t t c t a a a t a t a t c c a a g t g a a t g c a g a a a a t a c a t t a c t a t t t g a g g c a g a c c a t      300
g c t a a a a t a t a a t t t a c a a t g a t t a g t t t g c a c t t a a g a t g g t t a a t a a c g c a t t t a a a c      360
c a a t g a a a t g a a g g t t a a g t t g a a t t t t g t a g t a t t t g c t c a g t c t c t g t c t a a a c a a t a      420

```

gttcatctga aaagtttggg aaaagccaat acctgatctt ctctttatgc ttatcatttc 480  
tactggcatc ttaaagcaaa accaaatcaa tccgcatcag aatttttacc ttttaaaatg 540  
gaaactaatg gcn 553

<210> 8567

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8567

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gggagaagca ggggtaaaaa aaaaaaaagg ggggggactt cacccttag ggacagctgc 120  
ttccaaacct aacaaaaccc cagggttaagt cctcgtgctg ggcctcgagc cagcaaccct 180  
agtcaaatcc caaggcaccg gtcagcatgt ggggtcaagg gcccactatg gggacataca 240  
ctcaagagga tgaaagctct ttagcttcag aatcagattg ccttccccag accccacccc 300  
aaaacaggct cctctcccat ctcccccttc acagtgacaa aacacaagcc cacatcccag 360  
ggcctggagt atttgcattg atttgcattg acggcaacac aggtccagct aaggcctttt 420  
tctacataaa gtgacatcag tgcanggctg gggaatttgc tctactgggt gaaagatatc 480  
tgaggggccc caaccagnn ggccgagncc ccttcaggna gttantacc ttggaacttg 540  
ggctggccag c 551

<210> 8568

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8568

gngattcttt ttttcattga aaatgtcaat ttanaaaacn caaaagattt cacactttat 60  
tcagacaaca ctgagagaag aaaagggaag agtgagtagg ggagatgggg agatccggct 120

cccaaggatt tcaggaaaca cagnggggca cctgatctag cacacattca gagggtaggg 180  
 aggggaaggg atctagctat actctgggca tggagcaggg aaggtcgtcc ttgctatgga 240  
 ggaaaggaga gaggaaggac agaggaagag tggccccca tctcatctcg acaatntcac 300  
 aagacaggag tatatcggga cctagctacc agggagggat ggatgcaaga agggattcca 360  
 ggatctaaca gaccttgac actctggatc tactctcaag aaacaacctt ccccagagaa 420  
 tcaggatctg ggggaaatgg ngggngtcag ccaatctnct ttagagaccc ccaaagcaac 480  
 cccnggtttg gggttcctgc ccttcccca aaatgnggga aatgaaaaag tttggccatg 540  
 gggaat 546

<210> 8569

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8569

ctatggagtc atgtttaatg tagggaaata acattttgtc aatactaggc accataaaat 60  
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 ctttgtttta gttagttacc ctgtttgcat atagtgcaga aaaaggtctt catgttagca 180  
 ctatgtacat taagaagaga tccaaattac aagagaggca gataaaattt gaattcttta 240  
 agcattcatt aaacgaagtt ttggagtaac atccacgttt atcttccttt cactaatcac 300  
 gttccctgtt aagcacatca taacaacagc acagtgaagt gaatgatgaa ataagagcat 360  
 tttgatacac tagaaaacag tgctcagtga gacatttaca ttctatttat atgattaaac 420  
 atttgatcat acagtacctt cctacaggat tactggctaa ttttggggtg ggggttatac 480  
 tattagangn attacttacc tggaaacttn cttcctaata tgcaaccttt ggggctttaa 540  
 ttttatgg 548

<210> 8570

<211> 261

<212> DNA

<213> Homo sapiens

<400> 8570

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cacatgaagn ctncatttat tctgggatgg gttagagtaa gcctttgagg ctgccatcag 60
gctggctgag ttgntgcca acattgtatc cagcagtcctc aggcccgcac agtgcacanc 120
cagcatgggg ctnacagggtg cagatggaat ccataagctc ccancntgc tgcaaaggcc 180
aggcctaggg gtccgggtac atgcantgag tccttggggc anggccagcc ctgctgacta 240
cacaancang gttggtggng a 261
```

<210> 8571

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8571

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ataggtacac gtctattttac tgcacaaata tcaaagtgtg acatcgatgg taaaaagttg 60
taaactggct aacagtcac cagcacttaag tacaatgggt ctatactgac acttccattc 120
tcattttaag agcttatata tttaattgat gactgctctc ctcatcaggg acatttaaga 180
tatggaaaag gcattttatat acacacgcat gcattgcacat atgcttaacc ttacaaaactg 240
aaaaagtaag cccaagcatg attaattaat tactttgcct ggatcaataa atactagtct 300
caaagtgtta gtgtactaat aaggacagaa gctatcagtt acataaatta tcatgttgct 360
acctactgat gctccatttg ctaatgcag ttagtcagtc ttagacttt atccaacaca 420
tacatagaga ttattttttt ggttgnttga aattctcagc agatcaacag atctcttttg 480
gacatttctc ttccattact nttangatga aaatggaata cctnttaa ataaaatttt 540
aaatnccngc c 551
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<210> 8572

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8572

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ccattgaaag aatatttatt ttgcagctgt taaaagacat ttttcctaa aaaaagaaaa 60
gctgtgcttt acatagcaat cttataaaag aaatgctaga atcagaaaac catcatttta 120
ggctgggtgc agtggctcac acctgtaacc ccagcacttt gggaggacga ggcagggtga 180
tcacttgagg tcaggagttc aagaccagtc tggccagctc gatgaaactc cgtctctact 240
aaaaatataa aaattagcag agcacagtgg cacctgcctg taatcccagc tactcaggag 300
ggtgaagcat gagaactgct tgaacctggg aggcggagggt tgcagtgagc cgagattgtg 360
ccactgccct ccagcttgga caatagagca ggatttcgtc tcaaaaaaaaa agagaaaang 420
aaaaccatta ttttgcaata gccaatgtta taatctacac aggcacagac tatcaatgct 480
taaaatcatt ttaaaaggac atcttaaggg gtaattnccc gaaatttgga tttttgaacc 540
cttntgtaat naaaattcn 559
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<210> 8573

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8573

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ggaaatcaag ttttgTTTT atagtaacag aagtagacca tctagaaata tttcagttta 60
tttaaattgt taagtagaat atgaaaccga atttgtagct agtaccagag aatggactta 120
actgtttggt gtttaatgag aacagcttct acacaggatc ccaagagact tacagaaaag 180
gggcaaagcc ctaatatata gcaaataaaa ctcatgtttc aaacagatta tacaaaaatt 240
gatttatact tcatttcctt tttttgatat ttagaaagtg cagatttaac aaaaggtagc 300
catatccttt ctatgtacaa tgccgattat aattatgcaa aactgtcagt ctgttatcca 360
aaaatcccag tgtttagctc tccaacctta agtcatggaa ttgaataaga attaaagagg 420
gttaaaataa aaaagctaata gccacattcc agataaaggg aagcaccaat acattaatct 480
aacaccagta ggttaaccct aacntttcaa aagcttaaca tcattcatta tatttttagt 540
```



ggaaaatagg gatnttc

557

<210> 8574

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8574

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ctttttgaca gagttttgct cttgttgccc aggccggagt gcaattgcta tggcgtgac 60
ttggctcacc gcaacctccg cctcctgggt tcaagcaatt ctctgcctc cgagtagctg 120
ggattacagg catgtgccac cacgcccagc taatTTTTTg tatttttagt agagacggga 180
tttctccatg ttggtcaggc tagtctcaaa ctctgactt caggatgcc acccacctcg 240
gcctcccaaa gtgctgggat tacaggcgtg agccactgcg cctggcccgg ttttactttt 300
aacaagcgtg agagcatctg ttgctgagct atgtgggcaa catgcatgtg aggtgcggcc 360
ctgccctcca ggacacgcag cttcatgagt agagaagaaa tcttatccaa gggcgaagta 420
gcaagaacac agcaaaccac cgcacacaga agggcgatcc acaagtcaaa ctggcanatg 480
gaaacagctg agggctctta ntggctccca anggaaaagg cgggctantc tgagaactga 540
ngcngaaggg acttgctggt t 561
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<210> 8575

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8575

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gattcaaaca agtataattc tcaagttatc acaaaatttc ccacaaaaat ttacaatcag 60
caaaatagtt tccttatttc tcatgtatca ttttcatata attccatggt ttactaata 120
ttatatgtta caataagcct ccattagtcc ctcaaaacga tgatataaat aagtctgtac 180
aacctagcat agagtaaaaa actgaaacca agattcccaa cgtttttcat agcagccggg 240
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cacactttgg tgacccaac gagaaccctc tcggcagcag ccaggagctg ttcaccttcc 300  
 agaagcaggg cctgtggcag cctaacaggg agaggccacg gggcccaaaa acgcaacacg 360  
 tctcaaggca aacccgaggg aggaacttgg tctgggagga agagagaact cgctcctcaa 420  
 ccaccccaga cactggagtg tcaggaaagc actgagctgt tggggcacac tgnccagccc 480  
 ggnccagcaa gctaaccagt cacagnttca ccttcaactt ttcaaggagc aattttantg 540  
 gggaanaacc ctt 553

<210> 8576

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8576

gtttgttctc tagttttatt atttgtcaat tttccaaca caggaactat aactcatttt 60  
 gaggattttt ttcagtgcac ttcgcagcaa aaatgaacaa gggaatcatt aaaattgttg 120  
 tacacaaacc aactcttttt cttataattt acaatttggt gaaaaaatta ttgttttgct 180  
 gttttcatcc tactaacctc tttacagaa cacaatttat cagagcacia agcttaaaact 240  
 tcttatgatg atgcaacaga cacagccacc tacaatggct gataaacaac aggtatgtta 300  
 cacacactga ttggaagacc atatcagaaa aaacagagta aggcaccact cttgggaaat 360  
 taaggtagct tgcagtaaca agtgttgagc accataataa gtaggtgctc aataaataca 420  
 tgaatgaatg atgaaagcca taattagctc tattctttta attgccagca attcttcaac 480  
 ctcaacaaaa atacttattt aaaaaaagga ttgnacctgg atccacttnc tggacntttt 540  
 ttccggaanc cttttantt 559

<210> 8577

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8577

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catctttaag attctatitt tctagaacca cttttggcac caaaatctgt atcagtcaga 60
ttcaactaga gaagcagaac cagtagggga tatattgaga ttatttgcaa ggaattgact 120
tcagtgattg taggagctgg ccagtcatgt ctaaactctg tgaggcaggc tatcagaagg 180
gcagactgtc aggaactntc gccaagcact gggctgctgt cctcaggcag aatttcttcc 240
tcagggaac ccttagctct gttctttagg cttcttgact aatcagggtca ggctgaccca 300
gattatctga gataatctca cttacttagt caattgggaa tggacttctg tcacatctac 360
aaaatacctt cacagaaata cctagattag tggctgattg aattactggg tgactgnggc 420
ctagctaagc tgacacatnc naagaccatt cgaccacca caagccttgc tgaagcttaa 480
gggctttngg acaagcctta accttttcc actggggctc cgggatgggc agnnttattt 540
ggctnaacct aaaatccc 558

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<210> 8578

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8578

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gctcggngcc attttattta atgcaaacac tagacagttt acaagtcaca cctggacaca 60
agcacgtgaa cagatgtaca gggaattctg gaattttgag atcagtcacc atttcttct 120
cagggccctg gcactgaacc ccagcccctg tcccagagcc tcccctntgg gtcccacccc 180
anaagccacg cacacctcct tccgcccagc tttatctttc cttgagctgt gacttcaccc 240
agcatgtgct canagttgtt acaaattttc tctgccaaat taagctgaca gagattggcc 300
actttcaacc agtcctttca gtccactgtg tctcccctct cgcttgggac aggcccatgc 360
tggccagtgc aaccttcaga tagacacatg gtgaccagag cccgccaggc ttntgcaggt 420
ggcagtgtcg agcaagtgtg aagatgtctg tgggaaggag aagcttctgn aatgaacgtt 480
ntggaaacag aaagntnaag ggnctttcan gcattttcag gn 522

```

<210> 8579

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8579

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aacagccttc accatctttt attcattctg ctgtgataca actaaaatgg ccagtaaatt 60
ctcccctggg tctcaggtaa cagttttcca aaagtgaagt atcactttct ctgcacagtg 120
gtgaaagccg gcatttggat gggctggatc ggggtggacag gctgaaacac tggcttcttt 180
ctcacttcan agtgtgtttt cactgcaggg agcagctgat tccttttgat gatctgtaag 240
gccagctgag tattaccatt ctgcagttca aggtagactg ccagcaagat ggcctcaggg 300
ggcacctctt taggatggat cattgaagcc gcctgggtgga gacactttcg ggctttgtca 360
tattcgctcc tcaggcagta agcgtgcca aggttgaaca gcatcacagt cctggcagag 420
ttgacggaac tggggtagca ctgaggggcc cgcttaccag angattccat tggttcattt 480
tcaccttgct ganccttggg cctgctcatt tgaagaaaan cctaaggnga cattagtgac 540
atttttccgg g 551
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<210> 8580

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8580

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gtgaggttga aaagtcattc atacagagga ctttaatgag cattcagatt tttcacttgn 60
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atttacataa acattgcatg aatatcacag tggatatgta gagaagggtg ataaacctta 180
aaatgtaaaa tatcaaagga tcaaaaacat ctaaaactga cctggaatga attatttgta 240
attttaatat tctataaatc taagtacctt tttatgttaa acttaaaagc attataatgg 300
ttattaaata gaacaggggt caagcaaact tttcccagaa aaagttagat agtaaattatt 360
tcaggctttg tgagttacag agtttctatt gcaactaatc aatgctactg ctgtagtgca 420
```

aaaccagccn taggatacac gtaaaccaat gagentgact gggttcata gaacttattt 480  
 taaaaatagg cacaggnccg aatttggtn cttgaccata nttgntgacc tttnaacaaa 540  
 naaa 544

<210> 8581

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8581

actttttaaa agttttattc agcaataaga ccataatttt tcatatttaa ggagtatgaa 60  
 aaatttgtgg agtttttaaaa gctgaataca tgtagcgttg gatcaaggca catacaagac 120  
 tggccaaagg gcgtacaatg cactttggtt ttttgttgaa aaaaaaaaaat catggcaaca 180  
 gaaaagtgat atggtttttc aacaagtaac agctcacaat tcagtaggaa gctagaagga 240  
 aatgtttacat tacgagttca ttatataata tctggaaaat tgtgacagta atgggcagta 300  
 ttcttgatct ttgtaaaagt aaattgaaca tttatgtcag tgtaaaaacc tttgacataa 360  
 accagatcta aatttgatgt ctagtattta tttttcttta aattatctct tatttaaaga 420  
 actactttct ctggaatggt gaagggaatc gcttataatt acnttcattt ttaatatgcc 480  
 tnaaagggtc tctgacatnc cttatgataa aacctcttaa cccttaccaa ttttgggggtt 540  
 aaaatcactt tttaaaaatc ngganggggt ng 572

<210> 8582

<211> 493

<212> DNA

<213> Homo sapiens

<400> 8582

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 ggggcatgtg caaacaacag aaagggggaa gtcagtcctg ctgtgggaag cccacacatc 120

agtggtgttg agcaaagttc acgaaggcca tgggctgact gagctgtggt gtacgaaatg 180  
 acattcagct aatactggac tcggttcacc tttgacacct ggagaggtgg ggaagccagg 240  
 ggggtggggag tccagctggg gatccttgtg tttaggaagg gggcggccaa gggatgagcc 300  
 tttgggagag gccccgtgtg gcaggagggc tcatttcaca agccaacagg cctctagctc 360  
 gccgctccag gtggatgttt ggtgacctga agggcccttt ccagtccaag ttggctttgc 420  
 aatgggaggg gtaggtgcan cnagggtncn anagacagaa atcctcttta aaggaaaaac 480  
 cnaccaccna acn 493

<210> 8583

<211> 429

<212> DNA

<213> Homo sapiens

<400> 8583

cttttttttt tttttttttt ttttcttggc aagcattcat ttattcacgt aacataagcc 60  
 agacactatg ccaggggctg gcgatacaga aatgagtaag acatgatccc tggccccctcc 120  
 catccctgga atgtctacta ggaagaagct gctagaaaaa gacaacatgc tacttttaaag 180  
 ccaagagggg ccagtctccc attccagctt ggtacacact gaacacattt gaggcttatg 240  
 actggttctt ttacttacaa atattgttta gacacatttt caaatgtcac accaatcaat 300  
 aataataagg aatggatttt atctatattg acagttcttt naaccttaag agtgaactgc 360  
 tacaggtaag attcanticac atttttcagg agaaagctnt tngnaccaa atgcttnggn 420  
 tatctaata 429

<210> 8584

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8584

caattctcac aagatttatt tataaataat gcaataaaaa tactagtaag ctctttatgg 60  
 agttagacaa attgatacaa aaattcatgt agaaaaataa acacggaaga atagctagaa 120  
 cacctgatat tctagtaaaa gaaaagccat aaggggtgtc tactcctatc acatattaaa 180  
 tcattctata aaatctctgt aattaaaact gaaatattga cacatgaata aacagaaaga 240  
 ctagtggaag agaagagaaa tctagaaata gacttaagtc cataaggaaa atcagtatat 300  
 gatgaagggtg ttatctgaag tcaactggagc atagatgggc tctctaatta aatgggtgctg 360  
 gacaactggg tggccatttg gaaaaaagggt aagattagaa tccattcctc atgccatnca 420  
 cacaattaac tccaaattta aagaagaatg acaattgaag aaagtgtag agaattcctc 480  
 tataaactca gtnttgagag agcnccgnaa acntaaagga ctgatcaatg gnctccgtaa 540  
 aaaattaaa 549

<210> 8585

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8585

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 gggttctagaa tcattccagt tggcataccc gggtcccacc acggctgtcc tgggcacaca 120  
 gttaacatgt catgcagtta gggggaggga gagaggggag agggcagggg gggagtcagt 180  
 ggccctgcacc gcacagccac tgggttagag aaagtcgggg tctcccaggc tgcaaagcct 240  
 tgtccagcca tgtgtctcct ggccctgggc tgacctcctg ctgtggccat agggtagaca 300  
 gcctggcctt ggggctgggc catggctgtg tcaggtaggg aaagccacca tcctgccttc 360  
 agtcccctgg gcccttggtc tanccctct tccccatat cactggggat aatttgnttg 420  
 cctgggtctn catagctcac cagttatgga ccaaangaac aagggcanc accctgaggg 480  
 tncatgctgg caccttgngg tggccnacc 509

<210> 8586

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8586

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cagattctga ggtctgtttg tgtttaatca gacaatatgc aaagtattta caaccaattc   60
tggatacccc cccaccccc gcaagtctgg gccttggaaat ttcggagccc caggcccggc  120
ccagagccag ggggtcccca ggcctctgca tagtcatctg aaatctacaa aacactgtta  180
aaaaaaaaaa aggacagtat taagacacct tacacaaagg gccttaggca gttggagagg  240
gatttgagag ctgctgggg tgagtggcc cagatttgac tggaatggac gggagaagac  300
ttgggtaata aagacgtatg aaaggaaaag ttgaaatttc ataggcaggc actgcttggc  360
ctccttcccc actggcaggg cctggctggc tcaagaacct ctggcagtgg gaatgttatt  420
gctatgatga gggggccatg gtgaaatgtc aacatgtttg ggggacggac cggggggaca  480
ttttacatgg taaatntggc ccncatgaga cccccccact tccancttc ccccnncnccg  540
gg                                                                    542

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<210> 8587

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8587

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cagtatacac tctctttatt atgagaatga aaccaaataa taagcaaaat acatcaggaa   60
tttcaaattg tactgcaaag aaggtcccag ctggtctctt ctgggagtga tctaactaac  120
ttaagctgac cctgtgactg gctgaggata atcccttctg tccactgcac cgtgcaatgc  180
cacaggtcat gagatggtea gttcctcttg ctctgtgtcg tctgaagcaa gtcgaggccc  240
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attgtcaaga ctgtactgtc cctttaaggt accacatgcc accatagctt acacagcagt  360
cctttagtac tttatccacc tctgtttac tgagatcttc tccacactct tgagtcaacc  420
cgagactgga tcatgtttcg gcgtaccggg taatttttgg aaaaaatttc aagcaaaacc  480

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tgatgatgct gatcactcat gctcncagan ttccaaangg ccaaacacct ttgntcatc 540  
cggggaagca gcaant 556

<210> 8588

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8588

gttttattta ttcacttaca ggaaatataa acacaaattc taaaagtgtg aagttgcaaa 60  
cgacaggcaa gttcacattt caattaatgt gaactgaaca agagttaaag gtgattttta 120  
aataccttcc acgttagaaa atccttcttt cttaaataag tttcatata aagccaagtc 180  
cttgcaactt aacgacggtt ttacagtctt aagtgatatt agaaagtgtc cttgtttcac 240  
tgtagttgcg tctagtccat tttcttgtag agccagcaaa gcagcttctg tgcanaggtt 300  
tctaagatca gctccagaaa aaaaacaggt ttctgctgag aggttttcta aggagacatc 360  
angccctatt ggcatgggtt ttgtcagact tttaaaatag aaagcctgcc ttgggatctg 420  
ggagggtgggg atatagatga tcttatctaa tcttccangt tcgtaacaaa ncagtatntt 480  
aacacatcag gtctatttgn tgcttgcaat aatcntgaca cttnnggtta aaaaacttnt 540  
tgaa 544

<210> 8589

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8589

gcaaggaagg aataagggga tttattgaaa atgaaagtac actccacagt gtgggagtgg 60  
gcctgagcac aggggctcaa aacgccttct ttgtttttgt atatagaaaa tatacatgct 120  
ttctcatcta accgattttt tttttttttt tttttttaag acagagtccc actttgttgc 180

ccaggctgga gtgcagtagg catgatcttg gtcactgca acctccacct cctgggttca 240  
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 ctaaccaatt tgggattctg gttggagttc angaaaaact aaagttccca ttactttcag 480  
 aatatttttn aaataaaaaa tcctgatgac ttgtgangga aaaggaaaac atttnaaatc 540  
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<210> 8590

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8590

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 gtcagaacat ggagcaaccg caactccttc gcacttgtgc atgtgtgtgc gctcgcanac 180  
 gcacacacac acacacatat tctctctctc tcttatgcac acatccatcc acatcccaac 240  
 aattgcaggt gctaagtttg gacataaccc agggactcct ccctgacttc tgtcagggtc 300  
 tggaaagaag aagtaataaa tgaaaagcag ctgggactgc tcgatgcac tctcctcttc 360  
 caacaatgac ncggagaagg caagacatac actggggcag ctacttcctt ggcacaaaaa 420  
 tgaacaggca acaagaaggt aanggagtgt taagttaatc tcanggttaa accacttttn 480  
 aacaccncca aaacagtanc angcaggaaa aaaaaaacgg ggtnccaaaa cttaac 536

<210> 8591

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8591

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ggtattaaaa tgtctgtgat tacttatttc tcagcattca tctggtaact taagcagcat   60
gaagcaagag ttgcacttta aaaaatgaca agaaaatagc tattcattta gtcgacagag  120
taaggcccat ctcaattcca ggatcactag tttctgctta tgacggggtg agcatccgcc  180
agcgcggtga ttgggaggcg cccctgtgtc tttaggctga ggcagtgcc atagctgcag  240
tgcctcgagt ttccggagca accgcggggc tctttcttga ggagtcttgg gaggggccgg  300
tggcctgcct ccccatccta gatcagcgag gtcccaanaa gtgccgtatt gctgcggggt  360
aactgtggag tgtngacacg ttccgaggtt ggcttgacat cctgaggctt gggtggtgtg  420
aaagggaan gaaagaagg caggtcccc ggcttttgct ggctcttgct ttttaaggta  480
ggncntggg tctgcanagc natngcaccg gggctcttgc caaccnggg ggnntccc   538

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<210> 8592

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8592

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ctttttttga gacaggggtct ccctctgtgg cccaggttgg cgtccagtgg catgaccatg   60
tcccatcgca gccttgacct gccaggtcga agcaatcctc ccatttcagc ctcccgagta  120
gctgggacta caggtgtgca ccaccacgcc cagctaattt ttgtattttt ttgtaaagat  180
agggtttcat tatgttgccc aggctggtct caaactcctg ggctcaagcg atccaccac  240
ctcgatttcc caaagtgtg agattatagg cctgagccac catgcctggc tgcagatcct  300
tcataggttt cttaatctta agaacaaaaa gtcacctgg aaagcaagaa cacatcaatt  360
tggcagtatc tggtcactaa aagaactgta tctctggagg caaagcatgg gctctaataa  420
accccacaaa gtattggccg ctaattccca aatattcctg actggctctt tcacaaagct  480
taaggagggt tcaattcaaa gaacatttaa agccctttgg cttggatagc agacgagnaa  540
ccagacttt                                     549

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<210> 8593

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8593

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ggaattcaga ttttttattt ttggctctta ggaagtagtc agcaaatact gtataatccc 60
tagtagggaa ccatgtcata aaatatattg acatttctgc aacaaagaat cacactaaaa 120
ggaacacatc ataattaccc atagcttcct atcagtgtaa gttcagggtca ggtttggttt 180
caaatgggtt atgaaaatac ttttggtttt cagagcattg ggactttgga aatgaggacc 240
tggtatcatcc tttattaggg agaaatagcc ccaggagcca cgtctcagca attccatgga 300
aacacaggtt tctttgccct caaaattccg ttcctacctt ctttgncttc cttcccccaa 360
agaaactgga caaaaaaggt cagaactgna ttgntattc atacatttgc gttgatttaa 420
atcattacgt acaatttcta cattggatta gaagaatgac acagggggca gcacactttt 480
gcagnccagc ctcattcctg acctggagca gggcctatgg tggcaaagga cgggntcct 539

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<210> 8594

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8594

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gtggttttaa tagactttat attttagagc aattttaggt ttacagcaaa attgagaggg 60
tacagagatt tcccatatag ttgttgtccc cacacatgca tagtctccac cattttcaac 120
atctcccacc aaagaggtac atttgcagta attgatgaac ctacactgac acatcattat 180
cactcaaagt ccacagttta cattagggtt cactcttggt gttgtacatt ttaggggggtt 240
ggacatatgt acaatgacag gtatttataa ttatagtatc atacagagta gtttcgctgc 300
cctaaaaatc ttctgtgctc caattattcc tccctccct cccccacca ctgcttttta 360
ctgtctccat agttttgcct ttccagaat acatcccagt gtcatatagt tggcatcatt 420
taatatgaag ccttttcana ctggtttaat taagaggctt ccnttaagtn ccctgggaac 480

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tttttaacct gggnacccaa aatggcatan cttgattnag cccctgaata atgactactg 540  
caccacaatt ttn 553

<210> 8595

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8595

gctgcttaaa aaatgcatta atgttactgc tttattcaca ctaattagaa tacatacaca 60  
aaaaatgtgt atcatatata actttcaaaa atttccatgt tccatgagaa ctatgtaaac 120  
antgcaaaat gttncacta cgtaacaaaa gaaaatcagc attcccacat agtattagga 180  
aaatatnngg ataattctgaa tttatagtaa aacaaagtga tctgaatttg tagtaaaaca 240  
aagtgaata ttacaaagca gtcttgtcat gaagtagcct tatataactc agaagcagca 300  
catttcatac tttcaaacac tttggtataa gtgaaattaa tagaaaaca aaagaagaag 360  
aaaaaaacct ctacttttgt tttcacatta ttggacttna gcaacaaggc aagtgcacag 420  
gtanccttgg atgaccaaaa tggaaaacct tntnactnng cttggtttct ctttctggna 480  
aatgggccgt gcttaggaaa agcggtttcc caaggacntt ttggaaaatt aaggnggcat 540  
tttcactt 548

<210> 8596

<211> 519

<212> DNA

<213> Homo sapiens

<400> 8596

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tattngnaaa taccacagag acatggnttt ttttccct tgaaagatat gtccatccta 120  
ggaaatgggtg gggggtggat gtggggggtg cagagtaggg cctagtcct gttgncattn 180

ttgngngngn tattgattct ggaaggaccc tcgggtgcca atgaggctct ctaagccata 240  
 atcttctgaa tgcagggcat gcagctcctt aaaagacana cagccctggg agaaaganaa 300  
 gggaatatgt tctgaattca ttgactcag ttctctgcct gccaaagaaat ttcttncaag 360  
 cagtgatggc tccttactca ttcngagatt aagaangatg gccaatTTTT caaaatcaaa 420  
 ttgtttcaaa acttnccatn gtcccccagg gatcaaggtc accctccttn attcngcatt 480  
 aaaagtnttt catncttccc gttcttctcc ctctntta 519

<210> 8597

<211> 450

<212> DNA

<213> Homo sapiens

<400> 8597

ggatttgttt ctctttttat ttaggtactt tctccaaaag tgattttagt ttgtatggaa 60  
 aatcttctga tgctttgatg gtacatatc ttattaatgc cctcacatta gaataactat 120  
 ttccagaaca taaaattgta ggttcaaagt ttttttcagg ttcaatttca cattcttgag 180  
 ctaggcatgg tactgatggg ttccaccata acatacacca atgtcctttt gtctgtgggc 240  
 tcccatccag cctgggtggc gaagtcatct acaggtaaga ttgaccaaac ctctgaacag 300  
 gactgaaaaa aatgttatct tcagaaaacc agccctcttg tacactgctg ctgtgaatac 360  
 aaattgatta acttttctgg atggcantct accaatgcag atcaaacatt ttaaaantcc 420  
 nttttnttt gaacnaattt tttttccngn 450

<210> 8598

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8598

gagagagaaa ataattcact ttatataaat aacagctaag aacaacatac tgtgaacagt 60

ttccagagtt tgaacattca gcacaatcaa ttcttacttc ttgggaaaaa aatatcttac 120  
ctatcttttc tgttacagta tgccttcttg gagaaaatat tttagtggta acatcatttt 180  
ctggggcatt tggttaattt tgaagatga ttatgccaca tgaacaaaaa aaaaaaaaaa 240  
aaactggcag gaggaggagg gtcctaggcc attctggaag caagctgggt tttgcattat 300  
tcagagtcaa ctattaagct gacttatatt agaatggcga cagataagag gcaatgagtg 360  
acaccaggac atgcacagca cacagagaat atggcnctact cttggcttcc ctgcacagat 420  
taaacataag angcttggtg gaaagacatg gggaaaggng ctatnggggc caccntttgg 480  
aagcatattt ccagngact tgggtnttgc tatgcaacct ctggaccaa aactgggaaa 540  
ggcccctttc cccacag 558

<210> 8599

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8599

aattttgggg ctttattata attttcttt ccaagatgct acatagtcaa acagaactgg 60  
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ttcgctgaag agtttctctc ttcccttgct cccacccac aactgctgggt gccctcgctt 180  
ctaaccctct gcagcccgat ccatttgtcc tgactccagg ctaggtcccc aaggggaggt 240  
caggctcaga cttggacctg ggcgctggaa gtgtgagtaa tggttgagag gtggtataag 300  
aacaatctag aagactgact actcttcatt aaaaaaggta acctagagtt gactgtcact 360  
actgagaatt tccctcccta tgacagttgn tatttactga ccagaaaaa acacttctgg 420  
cagctcttct tcagcatccc aataaacccc accttcacat gacagactnt tcagaaacag 480  
aggaccaca gccttcagca gcaatnccag ttaaccaaca gagttaaca cacgcaacat 540  
taactgnctt ttgggaaa 558

<210> 8600

<211> 425

<212> DNA

<213> Homo sapiens

<400> 8600

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caaactgaga aaaagcagtt ttaatagcac acacacacac acattcatag gactttaaca   60
agatgtagta taaaatcttt aaaaaaaaaa aaaaggaaag aaaaaaatct gtatttactt  120
cctaagagct ggtggattaa ctggctgaca ggactgcca ggaaaaacaa atgcacagat  180
aatgaggtgc gccgacactg ttcattgagta aggaataacc atggatcatg ctaactgctc  240
tacgtgcccc gccgcctgga ccctactgtt gcctccttag cgacaaacca ccacagtcac  300
cccctaattc tccaactcag tagcttgttt aatgggctac ctcttaaaat tttcattttt  360
aatttaaaaa ttactctngg nttaaagacn ccncacnttn ttactggcca gtcccnacca  420
attat                                         425

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<210> 8601

<211> 458

<212> DNA

<213> Homo sapiens

<400> 8601

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caatgtcaaa atgtgtactg cactttataa aagcatggat aatattaaag gatcacaaaa   60
ggcagcatta gcattctcta tccaggtatt attaaatctt tttatcccat gccccctca  120
aatataggag aattattatc tgataagcct gaaacgactt ttttaatacc ataacctaaa  180
aagacacttc ttacaggtgt atgcaacttt ggctcagcaga aacacaatac gagcctctgg  240
cctagctaag gcactctatt ctgaaagtac ggaaaacatg cacgtatgct ccttatcatg  300
gcattgctcc ccaaaaggca gctcactgta tgctggggag aaaggctggg gcatgaagtc  360
accacaata tcatgcataa gcctgaaaga cctttcatac tttggaaatg ttatagtaat  420
tgcatgaca taaatgcnca cagntntntg nantgang                                458

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<210> 8602



<211> 544

<212> DNA

<213> Homo sapiens

<400> 8602

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caacacaatg gccctgcctc ccaccgnttt atttctttcg gtttcggatg caaaacaaaa   60
aattttaaaa gaaaatgtga cttcaaagga aaagaacaaa tttccaaaga cttgggggag  120
tgaaggcaga gcctgggtgca natggacgag gtctgcagac ggagggcaga ggtgggtggaa  180
ggggccaggg gcctgcaggc ctccccctgg aactgggact ggtctcggtc tgctgacgtc  240
agggtcagct cccccgcgga gctgacttca gcagcccaca gctgtggggc ttcagcagcc  300
acaccagccc agcccagccc agctctcgat acgtttggtc tttcatgctg aaaaataaat  360
aataaagcct gtcccggtgc tactgcctcc cccaactgca cagacgccag cctctaggcc  420
tgactgccaan ggaggtggaa aactggcac cagcccggca gcccctacan gccccccana  480
tggtgccta atgcctctg aaactgcana tncctcaact tggccttcg gccttgggnc  540
annt                                                                    544

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<210> 8603

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8603

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gattgattga ttaatttatt atttttaaaa acttggaat tcataaacta ggataatcac   60
attctccttc cccatctctg ggtagtgcca tcattttaat aagcaatgct caaataacag  120
aatggaacct ttatcatggg gatggccctt gtacaacagg agtacaaagg gcttacaaag  180
tgagtagact ggctcaaact aacaatcacc tttgctttgt tttagcactt tgcttacaag  240
tgaatgggct tctagggcta agttattagt tttcaattcc ttgtaatttg ataccaaac  300
atatcaaaaa taataagcta aaacaatatt caaacccata ttttattggc tttattacac  360
acttcaatat ttacaaagtt aaagttaa at gaaaagtctc tattgtatta aaaaaataa  420

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ctacagccca aattaaagtg ccctggggca aatcatatca atcaactaag aatcagtgc 480  
 tggatcaagg acccaggcca gtctctgngg tacaaccaa gccggtttat tttggganca 540  
 anggttgga ctctatacaa tccc 564

<210> 8604

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8604

gcaagataag gcactttgtt ttttaattcta tcagtctctt tagaatgaac aaaggtctgg 60  
 gtcctctgga aatctcaagt ggtgctgcct gcagctttaa aaggctgagc acaaaccat 120  
 cagagagcca cagtcctaag tagactcctc ggtgcgctct gccacactgt ccatgtgcat 180  
 tcagatttct cattaaattt tccacagcat gaccagtggg gatgacctgg gtggcctttg 240  
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 gttttctggc ccccgctgga gcagaagtg cagcagtga acacgcctga gtgtgggcgg 360  
 tgctttctcc tcaccgtcac agtgaatggc gagccctgca catgctgntc tttgatgcag 420  
 acccacacag tatagacgcc aggttccttg ggggtttag gaaatgtag atgtccatcc 480  
 ttggtatcct ggaccattgg tctgactggg ctgctttctt aactttangg gcaacgggaa 540  
 ctttgaacgt tgtntcctcc t 561

<210> 8605

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8605

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ctttcatnng gngatgcacg gcnccaatgt tttgcatatn ccttgatgca aagaaaagtt 180  
 taagttgcat cctgttttta aaaaaanccg aaacttaaga actgaacaag gattacaacc 240  
 acattccaat aaagaaaatt ttccttcaac aaagcatatt gttttgttta taincaatat 300  
 gngaccacca agagtittta tttagtgtga ccaaaggcaa aacattntac ttaaaattaa 360  
 attncngatg cntgaagaat aaaggtttaa ngttcaaaga ataattgggt atttaatgcn 420  
 ctcaatgtca gtattttggg gcaattttta aaggttttcc caaaaaatgg nctggatagg 480  
 ctttatccaa taatngggta agaacnggga aaatggaaac ncctttntnc cttttttnc 540  
 caaacctttt ttaaagacgg 560

<210> 8606

<211> 447

<212> DNA

<213> Homo sapiens

<400> 8606

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 catttctatg ctaccatctc agcatctgtg gtgaggggag ggggtgccact tcctctttgc 180  
 ccagcgagag ggcgtactct accccagaga gggaaacacc atgcccacag tgcttggttt 240  
 tgcactcagg tgtgcgggca gcacagcagg cctcaccttg cagcactctg ggcacaatga 300  
 cactgtccac tggggagctg cagagcttaa cagctggctg ggtctgccct cgggggaagg 360  
 gaagagtttg cnaaaaaagg aggccctaag gtgaggggaan tttggggccc accnnccagg 420  
 tttaaagagg aaacctttta ttnnan 447

<210> 8607

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8607

atTTTTTccc ttgacagtac tttattaatt ttcatccata ttttacttga ctaaaaatac	60
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acatctggga ttcagccagg tcttatagta tttaaattta taaccctgc catgcttagc	180
attaagtaaa tcagtatgca agcagtatTT aaggcaaagc tttagaata ctttaaattt	240
catttgtaaa tacatagatg caagactgtt tccataggaa gtcacaaatc ctcaaacaga	300
aatatgtgtg ttctcgatgt taccctgac agaaatcaaa cttggaagaa atatTTTTac	360
attagaaaaa ggactcagta taaggngaaa acaaaattnc cagtgggcta gacatgaaca	420
aaagtattca ttccccaaan gcacattctt tatacagggt tttcaaatta nctcctatta	480
atggaaggct tattcattaa atatgaaact atgcctacat taaaaccngg atttggttn	540
aagggttan	550

<210> 8608

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8608

atactgcaat gtacacattc ataagaaacg ttctaataac aattagcgca caaaactatt	60
ggtataaaca tttttccaaa aagagaaaac tattgcattt cgtagaaat cgcgtcctgg	120
gccgaggctc gtctttcttc tctgcagttg gtttggggac agaactccag cacgcagctg	180
tccaactgca gcggctacgt gtttccatgg agacaaactt ggtgtctcaa gttcagggtc	240
tcgaaagtcc cgaatatTTg tttgtcccga gagaagagtt ttgactttga agaggtccag	300
gtgggactcg ctgggggtgg ggtgctccgg gattagttca nagggaggtg tctggaagac	360
tccnggaacg ggacgcagca ctgntggttg gacncacccg gatgctgntt tcttgaagtg	420
tgcttgtgac actgacctgt tgacaaactc ttcacagccg nggcttgatg tgacgggnac	480
ttggcagaag tcccacatcc ttctggtgtg gtaaacttct gggttngatt tttgaaa	537

<210> 8609

<211> 426

<212> DNA

<213> Homo sapiens

<400> 8609

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aatagagaca agttctcgct gtgttgccca ggctggctct gaactcctag gttcaagtga   60
tcctcctgcc ttgtcctgcc gaagtgctgg gattacaggc atgagccgcc acgccagct   120
gagattacat tactttgagt gtttaattcc actatgacag gaagtagcct aatacatact   180
tttttggttt aattttctgg attcatcctg attttttagtc ttcctacctg agtacaacaa   240
taaaggaaat cacttcttag atacattaaa attacttcta aacttgcccc ccacacatga   300
actgttttca gtttgctatt tttaatggnc catgcttatt tatatagaca tagcataaca   360
ctgtnnacac tttatnggcc actggcctct ttcttaanan tatantataa aaaaattttc   420
tatatt                                           426
    
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<210> 8610

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8610

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aaagtccata gatttttaatg aaatttctat tcctgtctct gagcggctgc tgtgctttgt   60
ctgggtcccc caggggacaa gagtcaggct ggaatgagac ctctgtctgc caggcctttg   120
tggaggcctg ggaggagaaa ggccaaaggc tttgatgctt gggaccgatg cccggccact   180
cagctccaga caccagggat ctggcaaggg ggtggggcaa gggccagaca gaccaacagc   240
cttgggggtcc tggcgagagc tcgccaagac cagatctgaa gctggctggg ccaaagcagc   300
tgangcggca gcggcagaca ggtgccctgt gggcagaagc cagagcctac ttcggtganc   360
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ccttgggctt gactgnaact gccgtcccaa cggtgggtan ccactggnc t caagtcaaag   480
taggcttcca naagaggtgc aagcagcanc actggaaaag gtgcaacccc caaagggaac   540
    
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cggggtntna

550

<210> 8611

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8611

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tatcgaaact tcccatgtcg gttaaagtgt ttgtagagat agcggatgag tttattaagg 180
ttgtgcaggt catcagcgaa cattctactt ccaaccattt tcctctttcg gatacaacgt 240
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tcgttccaac gatcaaccac ttgggggggc gggagagtga gccttatacc gatcaatcta 420
ggcacaccaa gagagaagct tctgcacgcc agangcacc agtnccaagg cgcctacctg 480
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<210> 8612

<211> 503

<212> DNA

<213> Homo sapiens

<400> 8612

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gacaggacaa ggtttatttg gggtcctgga aacactgggg agagggaacna gggggcaagg 60
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gacagagaca gacaaaccaa cagagatgga gagaaagacc aacggatgct acggagagag 180
ggaaggaaac cccagtgtcc accacctncc actcagatga gttcacagga taaagaattg 240

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cgtggaccgg tccacacgct ncaggaaaag agaggagtgt ccgccctatt cactctaagg 300  
 aaggtggcag gccacagcct aaaccagccc attccatgtg atgggggtgt ntgcacatag 360  
 atcaagtcca ttctactggg caaggggatt tcaggccagt ctattctant gtttgggggc 420  
 cggggaaaat cgttaggggc gatccattcc cantcgggga ggggggattn nanggcangg 480  
 ggcattttcc ttggnccctt ttt 503

<210> 8613

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8613

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 attccagcca tgatgagcat ctgtcttctc aggcaatcat gatgaagctc cagggacagt 180  
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 ctggtcctct tttgcttagg tacaacagga gcaggaagga tcaacattct tgaaagcata 360  
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 gccctttctc cactcacaaa tgtctgcata ggtcacgtcc ggcactttca agcctccttc 480  
 acgtcaactc ctggggcttt tcgnggccca tcagtaggnc atataagntg naccttgggt 540  
 ttactcctnt 550

<210> 8614

<211> 251

<212> DNA

<213> Homo sapiens

<400> 8614

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 gcaggaggaa gaggagagaa ctggcaagag aacaaaataa ggagacanaa caggnttacg 180  
 acaaaaacat ttngctacn atagacaatt tganaaaacg ctctaccaca tgtagtactg 240  
 tacacggntt t 251

<210> 8615

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8615

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 tattacaatt atgattcgta gactttcact caattacata aattcactct cggttgagga 180  
 aaagagagag gtggcagagg attaatccaa aggatcctgg ngtcactac cttcaaagc 240  
 cagaccctgg tggggcaagt cctgccaaagt catcaggtgc tgattaaatg cagggcactg 300  
 ggtgggaagc aaattcctaa aatgtggttc tttccagaag catcttataa tctagctcag 360  
 gggcttgag gctccaactc actccggaat cacctgggga gcttctgaaa ccattctgat 420  
 cctgaactcc ccctaaataa atcaaactct ttgggccata aactgnaana aaaaagttta 480  
 atcttcacag gacattctaa tggggcagcc cnagaggnga tcccctggtc tanggttttc 540  
 atnaaatacc ttanaaattg 560

<210> 8616

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8616



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 gcgcctaact gaaattatta gactaaattc ttagtaaaca atgttttctg aaccttggtc 180  
 agaaatataa tcaactgcaa ttattttcca agtggtgttc taaaaaaca tataactgga 240  
 cactagtaag aaagtaaggt aaattattaa tccactcgca ttcaattcta caaggaatga 300  
 aaccattttt aaaagtggct tagaacaac aatttactga gcacttacta tgcacccacc 360  
 aggtatattc cttttataat gtaatcttca aaatgagctg tcaaactatt ggcccatttt 420  
 gtgaatgagg aaaatgaaaa ttaagttata taatcatgag tggcagagct gggaaatgaa 480  
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<210> 8617

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8617

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 cccgtatttc cctctgcccg aatgaggagg ggaggggctg cctgggtcct gcagctgtag 180  
 tcttgggggt cagatggaaa cttcatactc ccgcgtatcc ccagcttcat acagcggggt 240  
 gctgaagtcc gactccacgg tgatggggct gtaggagtgg gagcccgaga agccgaaaag 300  
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 gcctagaggc agcaggatgg ccagggccag gttccccct tccagctgcc gtgatggatc 420  
 tgtggtctgg gtcacttcag ttttcgntg tccaggagct cctcatangc aactttgcag 480  
 antgggggct ggcttggnc actgggaagg gtggncggc acacaggtga tggatgaact 540  
 ncccataact naaagcccta tn 562

<210> 8618

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8618

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atataaaacc tttgtacatt tttaggtatt tttcccttca atatttaa ataacatgatt  180
tcttctggca tgtattta atgtaagtga catgatttta attagtcttt ttttatcggt  240
atttcagcca ttataaaagc cataaatgtg tttccagaaa aagtgccttt gatattatta  300
cagtattctc tcataaaata ggaggtacgc ttgtgagttt agtactttag ttgtaggcac  360
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ttgtggaata tcaccgtgaa gaacangatt agagagatga ctatttgcgg gtcttgcctt  480
ggcataagca gtgtaatgcc ccgacctata gtcnctgng gtcaacaacc tcnntttagg  540
gatnagtcctt                                     550
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<210> 8619

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8619

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gctttaaaat aatctacact caaaaaaaga gagagaaaga gagagacctt tggaggaaat  180
atgcttattc aaaagcttct tggaaaagaa aatttacctg aatatcaagt catgactgat  240
ctcaagtgta atgtttaaaa gcttcacaga catgaatatt acaatcttca ggtctcagga  300
cttttaattc gagaaagttt agagtttggt ttgtttttta aattcacttt ctaacaaaaa  360
caaataatag aagtactcaa attttcacta tttacaactc tcagcctaca atctgaaatg  420
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acacaataca agttctctta aactgcagca ttaaagggtg ggcacaccat tcttctgctg 480  
ctcgattgnc atccactgga acncacnttg aaaatatitg tggtagtaaa atgatacctc 540  
ctgtnccttc aatngccaaa 560

<210> 8620

<211> 528

<212> DNA

<213> Homo sapiens

<400> 8620

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tatctcacia catttccctt tggttcctga atttgctaga ttcctatgta ccagcaaata 120  
tccattagca tttctcaggt ttcatgatcc ttttcagata tgttggttga ttttatgtat 180  
atattgctta gaaacaaaaa tccacctgat attaaaacia accaaaaaaa atcataaaag 240  
caagcaaatg aacaaaaaac cctagtittt ttgtgctttt ctttcacatt tcttacaggg 300  
agatttgtat atctcagata ctttcaaaat ctaataggta agtaaaatta gtgccttaac 360  
caaacagtaa ggatacaaaa gaatcctcca tcacaagtta ctgaatcaaa cttctcatga 420  
catttgcnng atattcagat ttgaagattt ttaaatttag aatttaaacc aacttttagac 480  
tgctgatttn catattcaag actggaagtt gntgcagcat ataaangg 528

<210> 8621

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8621

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tacatgatca tatctgtaaa atggaacaag ggatattaaa tcataaaata agactttcca 120  
acatttggtc tggatactga attagtatga cacataatat tctaaaactt tgctttctct 180

atgctggcctt ttctcaacta aatgaaagca agatatgatt tttggatgct taaatagtag 240  
 ctaggtattc tcttattcca gaacacagaa aaaaaagcc attaatgtg ccaccataaa 300  
 taaaattttg ttactatitt aagtctaaaa ataacagtaa tataatcatg attcatttta 360  
 catgtttctg aatttatatt atcaaccag agaaaggttt atatcagaca ggtaggaaac 420  
 ctctgacaac gacagaagaa gtgaactgcc aaaacatgc tgaagnggtc tttaccctcc 480  
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<210> 8622

<211> 520

<212> DNA

<213> Homo sapiens

<400> 8622

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 aaaaaagaaa gaaagaaaga aagacncaa aatacaagcn caactcacat tttcaaataa 120  
 aggaaactnt tgctaaataa gtagcaatta tgctgaanaa tttatatgct aaagcacgaa 180  
 tgaatntaaa aacaccagag cagtcaacca tagcttttagc actttgagta tgattaacag 240  
 aatgaacttc caaaggncaa ttaaatgtng acacacttta aagagatatt nttaagcctg 300  
 gtcaatgtat aacagcacct nttaattcag gggtatncgg nttaatttag gcataacatg 360  
 catgggataa atgtacatat atntncngaa ttaccacatg tcttcnacca gattactaca 420  
 gaaacttcat gtatcaccta cccctaagag gttttggcta tgtagtnttc caggttntga 480  
 aatggattaa aggaaacctt aatttttttn ctttgggnacn 520

<210> 8623

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8623

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 tgaaatcata atcatcagaa ttgtctgtaa actactatta gctaaattat aaccttgcat 180  
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 taaaacatgg gaaagctcct gtaaaaaata tttatcanaa tattttctac ataaggatat 420  
 tttngctttc attttttagaa tcagcctnga ngagaaaaaa cattcctttt aaagtnaaaa 480  
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 t 541

<210> 8624

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8624

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 gatctggctg aagcagtcct cccccagctt cttcactatg acctttatac aactatgggg 180  
 gtgggggtggg atcacacagg cataaaaggg ctggaaattc cccacacagc ctccaagggt 240  
 aagaaatgag tagcttcaca tatcacaaaa gtgggatttg gaagtttggg ggtggctagg 300  
 ccctgagttc agaggtgtgg ggaaaaacct gtgaccctga atctcttggt ggggaatagc 360  
 tgccacctga ccccaaagcc ctttccttc ctgatgaagc tggtagatgg gccctgtccc 420  
 cacccttttag ccttaatcct naggcccatt tcctggcctt cacccttgga acacttctgg 480  
 aaaaccagca gggaggacag aancctcagn ttttganggn ggaggg 526

<210> 8625

<211> 511

<212> DNA

<213> Homo sapiens

<400> 8625

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cagaatttcc caaagggtgt tctttagaac acaagttcct tgcagtgtta ctaggtgcc 180
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ttcactaact ttctaagatg gnatgtgttt tccaaactta tttcatccta gaatcctata 360
tttagaagag catctttgga acttngttc ttiggaacac actttgggaa aactggatt 420
ctattatttc tacagctaac tagcccaaaa ggctagctat caatggctta atncagangg 480
catttaaccn ggcttngntc taccagcntn g 511

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<210> 8626

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8626

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aagtaactcg ttcatttagt caagcaacca ttttagctga tttagtcact gattcaacta 300
ataacattta ctcattnct tagatttggg aggcatagct tgatagctgc aaggattatg 360
ttaaatgtca gtgaaataat ggaatgtgga ttggctcatt tcatcttaaa gatcctgctc 420
acagggcacc aaacattaaa ctaggtttta aaattaaaat ggtngacatt ttctngngcc 480
agaaacttng ggtcaatttg ggaangtttg gtggggnaat ccaaaacatg 530

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<210> 8627

<211> 515

<212> DNA

<213> Homo sapiens

<400> 8627

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gagagggagt ctcgctctgt cgccaggctg gagtgcagtg gcgtgatctc ggctcactgc   60
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acaggcatgc gccaccacgc ccagctaatt tttgtatfff taatagagac agggtttcac  180
catgttggcc aggatggtct cgatctcttg acctgtgat ccacccgcct ccacctccca  240
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ttttaagttg agatgggggt tcaccatgta gaccaggttg gttttgaact cctgacctca  360
aatgatctac ctgtctcagc ctncagant gctgggatta cacacatgag ccactgcgcc  420
ggcatatgta acattttaaa tacctgactt ncttaacata aagnagaca gcntaaggnn  480
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<210> 8628

<211> 470

<212> DNA

<213> Homo sapiens

<400> 8628

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cctcaattgt ctaatatggt aaccactagc cacatgtggc tactgatcat ttgaaagggtg  180
gttacatgga ctgagaaact gttttttttt tttttttgag atggagtctc gctctgtcnc  240
cccagctgga gtgcagnggc nccatctcgg ctcaactgcaa gctccgcctc ccgggttcac  300
gccgttctcc tgcctcagcc tcccaagtag ctgggactac aggcgcctgg ctaatttttt  360

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ctatTTTTtag tggagacggg gcctcaccgt attanccagg atggctngat ctccttgacc 420  
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<210> 8629

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8629

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aaaaactgag ggagcttttc tttccacca ccacaccatg gtttcccaat agttctcttt 180  
ttggaggact tttcaattga tgagtaaact gctttagata ttcagaact tcattcccca 240  
aatgaaagct aatctggaca aactatatat tgcatagatt tctctacaga ttctttgctt 300  
taaaacctaa atgcaactaa catagtgtaa ttttaaccta ttgccccac agtaaaaact 360  
atctgtcctg aaaaatatga tggatatatc ctgngathtt ccagttaaca gaattggtct 420  
acttcaaaga taattattat catatatcaa aataccagct taacatangg acattcttca 480  
gtcnttactg actcataggc atatgaacct tggngcccag ctttttaacc tnttccacaa 540  
tcttctcct cctc 554

<210> 8630

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8630

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ttccatgaaa tcagacatat acgggaatgt cttgattacc caacaaatcc tctccccttc 180



cttccctcat caaattgcta tgattgaagg cccaggaagc taccaactac ttagggcttt 240  
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aaaaatccta tccaaaacag atgnngcttt ttacatacaa attgggtaga acgcanagcc 480  
tgatgatgaa agggtcattt tttactggna ggnntaaaaa atttaaattt tgaaaatcag 540  
gttnggn 547

<210> 8631

<211> 415

<212> DNA

<213> Homo sapiens

<400> 8631

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ttttccttat atgggtgtcag ctaataagta tttggggaat aaatgtgtag atagtggctt 180  
gtttaaaaga agttacatta tttggcattt attacattt atttttctta attgattaat 240  
tgcagttaaa ttaccttagc atgcaagagc agattttaca gattttgacg tatgattaag 300  
cagcataaag cataactaat gnggttttag tggcatgcta tgtattaagg cntgaaattt 360  
aaatcccccc ttcatacaaga ttttttgcag ttccggggaa tttnnaangat cnnat 415

<210> 8632

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8632

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aatttttttt tacaatgttt cttaccttga tcttaattta agtaacncta ggaagacctc 120  
aatatctttt attttccttt ttaattttaa aaaaagtgtt ttttccccag atncaaagat 180  
ttttgccctt gcataaaaaa acagtgcccg aacgatgacn caaggactca caaagactca 240  
cgggacctca ctgaacnctat gattcctact ctacatgca aggtcttggc tacccttaat 300  
tggaactgtca gcctgaaaaa cagcttttct attccttatt ttagtttttg ttaccaagaa 360  
agtaaaatga acagtaaaat aaaactttcc ttaaagaaaa aangaacaaa nccnaaaatt 420  
aangaaagag aaaagaaacg tctncattca attcacacac cctngggccc ggtgctggtt 480  
tactcaaaaa ctcccttct tataaattna gaaa 514

<210> 8633

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8633

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tatgagaaat ctctgaagag caaattcagt ttcgaaaaac agctaagat atcgaagaaa 180  
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gtgattttct ctgtcttata ctgagatcat atagccattt aacctatctt caaacagaca 360  
naaattttta aacactttct atcctttaag aaaatcttct ttgcttggct aaatgacaat 420  
gttcangaaa tgcctgccac agaagcctan aaaatccttg gcaaccattt cagaagaaan 480  
ttaccctgc ataaatgggt ttccagcaac cgcttcaata agctttt 527

<210> 8634

<211> 519

<212> DNA

<213> Homo sapiens

<400> 8634

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atcaaacaca aatttatatc aagattaact ttttcaacca gcttacaagc agacttttcc 60
ctttctttgt taaaaaatga atggtatgaa actatatggt aaagatgttt ctataatacc 120
ttacatttac atagegcttt acaattttca aagtgtttc acatgccatc tcatttaatc 180
ctcacaacag ccctgtgagg taggtacagc aggtattatt atcctcattt caagatgagg 240
aaattgaggc aaagagaggt taagtgactt gcccaagatc acacagctgt aagtgtctaga 300
gctaggacct gaaatcaagt ttttgactc cttgtccagt actcattcca ctgtaattac 360
tgcctcaagt tatgaataat gaactgtgta tcaaaattga aagcttactg aagttcattt 420
cagtgatgtc ttaacagtaa agttaaatga gaaatncaga acagtaggct gatggtttac 480
ttgacataaa atggtgcaaa ncactttggc taatacttg 519
```

<210> 8635

<211> 510

<212> DNA

<213> Homo sapiens

<400> 8635

```
gaaaccaatg cattctttat tgcagactga agcttagggg ctcacccact gtgagctctg 60
atttgggggc atctgtggct gccacactt tccaagacag acaagggcaa actctccaag 120
cagaggagaa aacaacttcc agaagctgcc cttcaaagg cctgaggtga ggacctgggg 180
cagcaggcag cttggcatgc aggggttaac cagaaaggcc gggctctggag ggctgggcac 240
acctaacct catctcttgg tgactgcagg tccactccc ttcttcagga gtgccatgca 300
gactctggaa caatctaaca ggccaagtgt ctcccagggt gggttaggga ggaggctnaa 360
cacaggctca gatccctgga agtggcaggg agagaactga gagaaacttc accctctgct 420
cggaggacat tccaagcct aggtccttgc ttcttaaact ctaaagtgt tataggaatc 480
aacttggggg tctttgctaa aatgcagggt 510
```

<210> 8636

<211> 424

<212> DNA

<213> Homo sapiens

<400> 8636

```

gaagttagag atgacaattt tgagatttat tctttatcag gagatgcaaa ctcaaatacc 60
tccagaatga aggcaggtaa tgcaaatgag gattaagtat aattaaaaaa aacagcattc 120
atccttaata aatggcatgt accactttgt ctcagcaggg atgcagtagg taaaggtgga 180
gactgtggtg agctagagga cgtaccccct gtcttagggg ccagtcattg ccaaatagaa 240
gtgtgggatac agtgtaaca gatcttctgg tttttagaga gaaactatag atattttcat 300
tttgacactt tctaattatt aaatgttcac aatgaatttt ttaagtgctt aaacactata 360
cagacaaaac catttgnatc tatggncaac ttngccttgg gggnttctaa ttngngactt 420
ntaa 424

```

<210> 8637

<211> 518

<212> DNA

<213> Homo sapiens

<400> 8637

```

ccaaatgggc atttattatt tgcacagatn cataaaaatg attcccatTT taaaaacat 60
aataaaaata tacattaacc acagaagtac ttactctaac tggaaagaaa atgaacatgg 120
ctattttcaa aacagtaata aacacaaaag gtcaacatac ataaatcatg acaagtgtac 180
atctcatttt tgacaaaaat aagttccatt ttacattaa tgcttcatca tcaggctcca 240
tattacatcc tctgacctta ttacattta ctatcaaatt tctattagca tgtgtcactc 300
aaaggcactc aattcagagg gtaaaaagtc ctgagcttaa gtaggaaaca aagttcccaa 360
ctaaaatttg aacataaata attctaaaga tcagagaata ttaaaatgtt taaaactata 420
atatctggtc cataaataat tcaaaaccta ataataaagg tgtcangact ggtcaaagaa 480
aagancctgt taggcagaaa aattcctngg aatnaacc 518

```

<210> 8638

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8638

```

aaataggaag attttaataa cagtcagtcc ctatagtccc cttgtctaga acaattaaat   60
tattatccct cagacagtac aagacttgct agtagactgt ggggaagttg atgagttgac  120
accagggcta gtggcatttg ttttggggaa gacagtgggc ttgggccgtg tggctggtgg  180
tttgaccggg gcagccatct tgacagactt gacaggccgg aaggcgcagg cgatgtcccc  240
agcagtactg gcgctgcgct ggaaggcggg ctcggggtcc ttgaggagct ggggtgtgcag  300
agggctggag ggctctgacg tggggggccac cactggggag gttttgaggg gctccaaggt  360
gtccagaacc acgtcagggg tgtgtttgac actgctctgc cgttctaagt tcccgtagct  420
cattcanggc cgagttcatt gntgcctcaa tatectgagc aatgacctca nggtccatgg  480
gnccatgggt antggaactt tttgacctn ccgttgggga anct                      524

```

<210> 8639

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8639

```

acagatcaca ggaattttta attgcagatc agtcatgcta cttgggggtga tcagaaagac   60
ttgaacactt accaagtga taattttatt aaggctctga aggtgagtgt ccggaggtgc  120
tgggtaaaac acatcacagg taagaaatgg gaaacctacc tcagcatttc tgaaaggcac  180
aatctatgga agggaaacct agcgtataaa aaccctcact ggatgtacat ggaaaggagt  240
atggtgagct atttcctttt taaaggatga gaccttcata aattggcccc tcggattctg  300
gtgattcccg ccgcaagcgc aaatgctcca gtgtgttatg aaaatggttt ggtaatctgc  360

```

tctggttctt cactgggatt caaagattcn ggaggtcttc tcgaatcttt tggataagct 420  
 ggtttaaaaa cctgaattgg taccgcgcatc attttccttt cataaaaaata gatatatctg 480  
 gtcagaattt ctataaaaaag ctgcacttgt agaaganggg gtcc 524

<210> 8640

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8640

aacgttttca aataatttat taggaattta aaactgaaaa taaaacctgg aaaaagaagt 60  
 tacagatgtg gagagaagag acaccggagg atggtaactt gctggcttcg aaacaccatg 120  
 taacatctta aaaaaaaaaa aaatcccaaa gcaaatcaga aaacggaatt ccagggtcct 180  
 gagcccatgg ttgggcccag tggggtggaa ggggtccgggt ntgagggaga gggaagctaa 240  
 gtgtctcagg actcagctca aacgtgtaga aaattaaaaa tnaaaaccaa taaaatgcag 300  
 cttctctttt attaggaaac atttaaaaaa aaaaaaccca aaacacgaac agccngncat 360  
 ntcagtaacc aagattattg cttttgggtt ctganggctg atagggtaaa caccttacac 420  
 aggccattna ctnttcaagg gtggggtttt ccggtngggg ccatgcttgg gnaaaaagct 480  
 caggcctggg ncctaaaact gggggaaagg gcccccnaa ggggg 525

<210> 8641

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8641

ggttttgaaa acacacacct tagtgtactg aaagaaaaac aatttctttt aatttggttt 60  
 gttgggtcca caccatct atcaatgtat gtgctattta caaataagtt ctatacagta 120  
 tttttgcagt accttgata attcctagac ctctattttc attctgtgta ttaatgtgaa 180

taacagatgg atattttaat atttaggcag atggtaaact ttcctatagg tcttggtgaga 240  
 cttcgtctta taggctgaac accattcaca aaatgtaata atgcttcatt ccttcagggtt 300  
 gaggtaaaga acttgagcaa ctggattagc aaagctgcaa agaatagaat gtggcctaag 360  
 atgtaattat gttctctgcc cttcctttgg gccagggtag ttttgcaatt gacacaatgg 420  
 aaaataggcc attaagcctg gaaattaaat ggtcttaacc ccaatcttac aggacnttaa 480  
 taggctttca cttggcntnt ttaagggnnt tcaacaaaac ctaa 524

<210> 8642

<211> 478

<212> DNA

<213> Homo sapiens

<400> 8642

ggaaacatcc tagtaaaaat ttattcagac aagaatcgtc aaaggatgct aaacctagga 60  
 ggggtagatt tgatgaggaa cagaattgtc aacaaggctt caaagtttct cctcaciaat 120  
 taccactaa ttgcaaaagg aaaaacaata acgatacact ggagaaactg gacatcttac 180  
 ccaagtgatc aaaattagca tcaccaataa gggacaaatg gacattctgt gcattctggat 240  
 gtatacctgc aatacatatc acttacagca tttcaaccct cactgcacta ccccaatcta 300  
 accatgagga aacatcagaa aaacccaaat agaaggatac tctatccttt agctgncctg 360  
 natTTTTCAA atatattact attataaaaa acnaagaaaa gctgaggaac tgnntcagaa 420  
 tanaagggtta ttgncattcc acntttggac cctagnttgg accgnggact tgaaaaaa 478

<210> 8643

<211> 459

<212> DNA

<213> Homo sapiens

<400> 8643

ccccgntttt catctgcaaa atgaggaact aaaatctggg aaaactacag agtcgcttgg 60

agggtaagcc anagggtcct tgcccttggt acacccccctg aaaacaaaac ctgacaaaac 120  
 tcaatngnca ttaattagng canaaacaaa gacagattca gcaagngcaa aggngactac 180  
 aattttccct tgtccttggg aagccagctc cctggtcgcc agtggcaggg tggcgcaggc 240  
 tgcttgccctg acctgccagn tttgggcgcc acaggccact gggcaaggcc agntcctnta 300  
 gctggaatct cggttcttct gggtccgcat cagggggctg tggcgcgca ggccctccat 360  
 gctgtgccgc cagtgccagc agcttcggca aaaagntttt gaaagcaaac ctgatctnga 420  
 cagaanaaag gccnggcttg anaactggnn atttgaccc 459

<210> 8644

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8644

gtcatttagt tattctttta tcattattac tttaaaatac actaatacat tcttatctac 60  
 ttccctccac cgacaaatat ttgctaaat taaaaggatc actggaagta ttatgacccc 120  
 cctcgtcaca ggtggcaga accaccacag ttttgtgaat gaatcagaga aggcaacatt 180  
 tcatcaacga aaactcattt aggtttcaaa aggcaggatg tagtacagaa tgcattattc 240  
 tgactgtctt ctggaataga aaaattggaa aggatgaaag aaggaagta gctccagctc 300  
 cactgttacc ttggcaaccg tggccaatc acaggggcag aaattaattt tgtgcccgtg 360  
 acataacgtg gcagaggagt ggggagccgt ggagtgggga gagaatgacg gctgggttta 420  
 aatgctcaga angctagtgg ggaagggtcc aggtcaaccc gctgggtggt naatctaccg 480  
 tnccaattan ccaactgggcc tttttcactg gaaggttnnga ttatggagag acnn 534

<210> 8645

<211> 531

<212> DNA

<213> Homo sapiens



<400> 8645

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aaatacattc aagtcagtgt taattttatt actgaaaact gagtaaatta taaagtgctt   60
tttctcaaga aaactacaaa cagttttaga aatatatata ggatatttca gggttagaag  120
tcaaatttgt gigttagggt acaagcttaa gaactctgga tgttgctgct ctaacaatgc  180
atttgatgat gtgccatgtg atactaagaa gtcagtagaa tcccaccagt cctactgcct  240
cagatgagtc ttgtttcagt catgggttta caaagtcatt gagtgcttga ggacttgttt  300
tcctggaagt gattccctac ttgggtatgg caagaacaca tcagtagtgt aaaactgtca  360
tctgtagtag cactccatga tcatttcctg gatgaccact ttaaattata actcacagat  420
atgtggggat tctaagaatg gtatatgtgg ngaatagaac ctggatccaa acataccagt  480
tctgactcaa cacaatctct agttctccat tttanggatt aatcatatct a           531

```

<210> 8646

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8646

```

attgctcttg atgctctact caatgtactg tccatatctt ttgtatttac ttcaaaggat   60
tctggatcag cagtataaat aagattctca gcactctgct tacaatgggt gttagctaca  120
tgtcgacaca gcacttttag ccagttttct tttggaagtt catctgatgt catctggaaa  180
ctgagtagca catttgccctg ctctgttggt ggcctcaca gcaaggcaaa agcattatgg  240
caatcttctg tctctcttat gtccaatacc ttcttaatct gagaaagagg cattaggtga  300
atatgcttaa gagaagctgg gggtcgggtt tggccatgag gactcctaaa agtgccaata  360
accttggtcc gntttcttgc tatctctagg caatcattga agaggaagag aggtacttgg  420
tctcctctgn cacaagggtg ctcacctaga gnaaatgggt caaccntgg cttacttcg  480
ggagnaaatt aaagaattac ttgggcttcc nttacttaaa taan                    524

```

<210> 8647

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8647

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gccaatataa gaatcttatt tactgcttta gtcaagaagg agatgttatt tcacttgtga 60
cttcctccca agtgaatgag tatacaattt aacaaactaa cacagttcag tttattaagt 120
tacaatctgt aaccacctaa tgtagctcag tgtatggtgg atactagata taaacaagag 180
tagggaagtc tttggcacct gcatgatgcg tgccggcttt taaattcaga aagatgagaa 240
gctacaatgc aacttttttt ttaatctaca gataccgcca aaagaagaaa tgtttatcag 300
atthtgaatg catactggaa agttggccgg tggcagcttt tcacattaaa tttcatcaca 360
agtgaactt gattacagcc caaactagac aaggcaattc aagtgccng accctgaagt 420
ncacgtgaga ctacaggaga acctgcatta tgggtgcttg ccagccagtc tctttgaggn 480
actgcctgta acagtcaccg gttgtngggg agaaacaact tccntttttt tn 532

```

<210> 8648

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8648

```

gataaaggcg gcacttggca tctagtactc aaacaacttt atttcactag ccatgagcaa 60
aaagttgacc ggctccaggg gattttccat cctgccctct ccctgctggt ggctcccatg 120
atttggaat aacctcatgt tccacttggc agtgccctggc tttgtgcacc cacatggttt 180
tggcctgggt cccagtgaat atggctcctc cctggctggg gaacatggtt ctgagaggcc 240
ccttgatctg ccctggggac atgtgtggcc atgctaaggg ccctgcccac cttcacgtga 300
ctggccacct ctgccagggt gcaggcagct cctagcatgg agacatcctt catggaagtg 360
agctttccca cccacctnca taccacatt tctcagaaac agagttaaca gggaaccaag 420
agtcaagaag ccacagggt ggtaacgtgc ctacaggcca aantngacc cttacctgaa 480
nagccnggcc accaaaggta tcaggaangg aaaaaatttg gcctggaatg agataggaca 540

```

agaaaaa

547

<210> 8649

<211> 520

<212> DNA

<213> Homo sapiens

<400> 8649

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anaaagtagg tgccccaagc ttataggtgg ctgttaacat tgnntttattt cctttataca 60
aaaagtagaa atgacagaaa aaacactntt gacagaaaca ataccactga cctgatctca 120
tgaaggagct gagccaaatc tgcccacatt atggggaaag ggaggttcaa tcaacattag 180
caaatactca tgcaattgat gaaatataaa atgggtatcag tggcttggtg aatgtcctgt 240
gggtaggggtg aatcaatcta ctcttaaaaa acatacatit tcccaatcat gcttttaaac 300
ggcatntttt aaaaaaaciaa gttatatata cagatatcac cccaaaatga atcttttaca 360
gtctactact ataaatttaa ggcatcctga tattctgntc ttctgctggt gaggcattgg 420
tttcatgggt ctcttttcca aaaggattgc cnaaaanttc cataattttc caanggcttc 480
nngggaagaa aattttaaan gggncctcca agaaaaagtt 520

```

<210> 8650

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8650

```

caacttaaaa agttatttat taaacaagtt aaacacanc taaaagtatat ttagagggtcc 60
aagattcaag tattttttgtc aaactttcta atggtaaggg gaatgataaa aattgaacag 120
atataaaaaa tattctttaa caaatattaa agcacatgga aaattcagaa ataaaaacac 180
accaccatat aaagaaatca aaatatttca tatgttttta aatgcttatg gtatgagagc 240
caaattgtct atttccaggt taataaacia tatataagct caccttttta aaggatatcat 300

```

actttgtgtc atatagaaat aattttggaa acagtatgtg ttgggtgtgt aaattgtcca 360  
 cattaagcaa aacatatttt acatatgaat attttcattt atacttactg gaaaacaaaa 420  
 cagaaaaact tataatttaa acatcttgat ttgaaaatat tttggatttg ataagtctgg 480  
 ttaatttcca caatgnancn gccaaagggg tnttcaaaga atggttattc aaaatttttt 540  
 aaaaana 547

<210> 8651

<211> 492

<212> DNA

<213> Homo sapiens

<400> 8651

gttatggcaa agtaagcttt atttaattgg tagcaggaga gtcacaactt caaactccag 60  
 aaaagatgaa gtaaatttgc aatgatttca tacaccaaga ttctcctac ccaaagctga 120  
 agatatattt tcaaggaaag gtgatggaaa gaaaaatggg gctcgcccaa gagattcttc 180  
 catccagcag gcatatactt tgtctatcat gagtcaagcc ctgatccaaa ggcttggttaa 240  
 ctcataatta cactaagcat ctctcctatg ccaagtaatg tggcaagtat tgtgagggaa 300  
 atacaaatgc cctaattgtaa aaagttcatt ccagtgtagg ctgaccttct caaaatgggg 360  
 tctggtcaga ttctccatgc taggctacag gaaagaaggc tgaagaagca aatttacaaa 420  
 tcagtttgcc taccattgng aattngagcc aatgacttgg cattnccga agtccttana 480  
 ccntntnaat cg 492

<210> 8652

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8652

ccaatgtact ataaataaac ctttacttaa gatcttgaaa tcaaaattag tttgtatagt 60

attcagaatc aaacctaattg acaaagcaag atgaaataac caacagcatc atcattatca 120  
 gaatagtaac taacatttat ataaaagatt actatgtgtc agaaactaag ggctttcatt 180  
 tcattcaatt ctcataacaa cctataaagt aggtactatc attatatcca ttttacagat 240  
 gagtgaatga aggctagaat ttgggtcacc ggcccaacat gacccaacta ttagtagtag 300  
 gtagagaagc ggggtctccga acctaggtaa tctggctttg gaatctgngc tcataaccac 360  
 tngctataa tgtctctgat agcagctact aattaaaaaa taaaaaatgn atgnnttcct 420  
 aactttaatc ccncngata gggatattct tgggtcattt atggctnaaa ttttnaaaaa 480  
 ccttttcctt ttaaccttta cctatccnca atttgggtca ctggttttat ggg 533

<210> 8653

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8653

gacatctgta actttaattt aatacaaatt gatcataact cataaaatgg gcaacatttt 60  
 aaataaaaaat actgctgggg tggcccagat tctggtagtt gaagggttgg ggtagggctg 120  
 acaattcctt ttgcccagg gaggccggg tggcgggggc agccatttta agaacccccct 180  
 gtgttttagct ctccggcta ctttgggatg gtgtgtttgt tcagagaccc caagtgcaga 240  
 atctaggccc caggactaga aagaaaagtc aaggccgggg agacatttag gctcagtctt 300  
 gcagcccact cctccagttc ccacctctgg gcagggatag agccaagggg caggacaacc 360  
 ctagatgtgg actccaccct ctcccagatt cttcacgatt ggatgctgtg gcagaaaaac 420  
 gcangtgggg cttgnnttac ccaccctaac ttccttctan ggagatgaca ttttccaaac 480  
 ttccttgcan ccaaggttct ggaactgact taagttcccc caaccgaatc tnttgaaaa 540  
 attanaattn gggaccg 557

<210> 8654

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8654

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cattctgatg gctcaatgtt tctgggatat aaactcatca ggcatgggaa ggatttccaa 60
at tt tggcaa tacactcaag ttatggtata aaaataacat ttgttttct ctcttttttc 120
tcattttaga cctaagagtt ttttgttata agacacccca gttaagaaat attgaaacat 180
aagagacttg accatcaagg gagaaaagaa gccaaagagtg aaaaatgcta tgaaagtaac 240
tccagacctg ggcggggcgg gaggtaggag gaataaggag aaaaggaggc ataagtggaa 300
aggccagggg cctgtcatct cagcagctcc gagacttgtc atgtttgaaa gtgcaaattgt 360
caatggattt taaccatctt gaggttgtga tcttttaaaa agctcaatga atgaggaagt 420
caattccttc aaatgcaaaa tagctggctt tctggctgga nggttgntgg gtctggggna 480
tttctttccc atctaccttc tttccaccc caaccattt cccaagaaa ggtccaaang 540
gtgccanttt tgnncatt 558
```

<210> 8655

<211> 289

<212> DNA

<213> Homo sapiens

<400> 8655

```
atttattatc ttctttatta atactcacat gtaacctttg ctttttacac anaagtctgc 60
tttagaagaa tgcctcctcg gcttatcatg cccaatgggg ctttttgttt ctggaccact 120
tcccctttct ccacccccac ccccatctcc aaattactct taacatgttc acagatacca 180
cgaatatttt gtaaacanga ttgggttac tggaacttga tttcattaac atcccacttc 240
aaaatggaag gcaggnggng gacagggtna gaaatacnan anagaggac 289
```

<210> 8656

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8656

```
cgatagtga aatatacttt attttttaat acaatagctg ccagcaatat actggtgctg 60
atgttccaaa gataaaagaa aatacatgca ttctataata agctttcatt tgcctgttca 120
agaaattata aagaaaatac taagctaatt aatgataggc tcaaaaaatg cagtatactt 180
ataaaaagcc gctttcataa agccagtgtt tactaaatgt tagcatatca aagtgggaga 240
aacactgcca ttttaaagca ataaacttaa aatttcaaga aacagcctat gagaaatagc 300
acttcctata caaattaggt ataaaaaaat taccaaaaat gtattatagt cacaatcaca 360
gtctttggag tagtacgtag aaagtctggt tttgcttttg tcttttaaaa aagagtaa at 420
acatagcaaa gttttatatt cagcaagttc atcctcctgt tagaacacaa ataattcctg 480
gtttagggtc tcaattaaaa aaaaccccga aaaacaaacn aaaacctgca nagtgctatt 540
cctcaacatg gctggtggga a 561
```

<210> 8657

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8657

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aactatttaa ttcactcctt tattctggga tgtntattac agataacaca actcacaaat 60
ataccatcag acattgaaaa ctaaggccat tctgngagtt atttttaaaa ctignggttt 120
tgcncataat gatcttaaaa aaaaatgaat taccaaaacc aagattntnt tntaaaatga 180
aaatttaatg caggtacagg ataactttag ggctatatct aatctgaagc ttatcaggta 240
gcaaaacat tttcgttttc tacagcataa ataacagctn taaggcaacc actacctnag 300
catgaagctc atttctccac gttagagtag tgnttacctg ctacagtac cagngtttan 360
agaccatttc cttttcagta gcaaaagaga ctttacctaa gaaacacact acatactaca 420
gaatccttgg aacaagaaac agaaaggag ctgnaactaa ggccctgaaa gccattattt 480
gnataaagaa atgtaacnat ttnacaccaa caggttcctc cggnggagnt ttnt 534
```

<210> 8658

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8658

```

gtagtagct tttacttatt atttatgtac ttatTTTTtg agacagtctc actctgtcac    60
ccaggctgga gtgcagtggg gcaaccttga ctactacaa ctcctcctc ctgggttcaa    120
gtgattctcc tgcctcagcc tcatgagtag ctgggattac aggcgtgcac cacctcgtc    180
ggctaattgt tttgttctt ttttgagatg gagtctcgtt ctatctccca ggctggagtg    240
cagtggcacg atctcagctc accacaatct ccacctccca ggtttaagca attctcctgc    300
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aggtgttctg cccaccttgg cctnccaaag tgttggggaa ttacagggtt gaaccaccgt    480
gcccgggctt tttggaattt ttagtanaaa anggggttna ccatgttggc caagctgggc    540
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<210> 8659

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8659

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agaaacatca aaggactcta accacgagtg acacactgtc ttaagtggct gtcgtgtgtc    180
atgtgctgtt tggcttgggg ataaagcaaa tccatacaa accaaacaac tccagaaaac    240
cccaacaatt tcatgttgtc aggaagctta ctttaaaaga ataagcttaa caaacactga    300
    
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taaggctgac actctagatg catcttcaag gaaggcctct acggaaggca caagggagct 360  
 ggggctggac tggctccctc tgggctttga ggccaagtgt cctgcacaga aggccctgca 420  
 aaagcaaaga ccaggtggca gcagcaccct tgggctttca aaagtgaag ggacaacgca 480  
 tgggaccng aatggantgg gaaaaggatg gaatgcaaga ccngaaaggt tccccctcta 540  
 aaactcn 547

<210> 8660

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8660

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 tctggtcatt tccactccaa gagcagtagc accatgtaga aggctgtgag cagggtcccc 180  
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 gcatcttcac caggtcatct gcctgcaccc tgtcccgctc gctgtgtcga ggggtccaggg 480  
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 ttcagtgcct gaan 554

<210> 8661

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8661

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 agacaccaag tcatcccaac caatatttat ccatatgaac agataaactg aacaaaaaca 180  
 tagttctgat aaaacctgca ttcacaacct aatgtagttt aaagtaaatt ttttcacaat 240  
 tgagggtgc tatTTtaggac tgTTTTgtta ataataaaaa caggaattat atagaagata 300  
 aaacaccatt ttttactgct atataatgtc ttgctatata aaacataccc tcaacaagtc 360  
 aaaatattta aaaccagtgt ttcaaatacc aaaaatcaca gctatgttac tgttcagtaa 420  
 ctccactcaa ataaatgtta gtactgcatt cttgaaggaa aaaaactgca gcccaaggcaa 480  
 gaactctgaa gttttgcact cagagtttaa aagacagacc ctactntgca actgaanact 540  
 gcccttttgt ttna 554

<210> 8662

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8662

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 ttttaaagta tcatatttca attgactaaa aatatagcca aatctgtcac aacacaacat 180  
 aaagtaatgg acaattatag aatattttta attaacagta acaagccatc tacatcaaac 240  
 cttatttcca actaaaacca aacaaaagca caacaatccc gtagtgtacc aagtgtgtat 300  
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 tgatttaagt agtaaaagaa aattcagctt caagagagta agttcatatc ttgaggaaaa 420  
 gtaaaagtac attaagaatg taaagccaag tccagtttct atgcaataag tgaactgtag 480  
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<210> 8663

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8663

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actccatcaa gctggagtcc gagaggnggc aggcaggcgg gcaggggctt aggaacacgc 240
gaggcagccg cactctaagn gtctctccac ctnttctaca aacgaggagc catccgngca 300
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cccacgacat tccatgatgg gcaccttggg ggctgtggca catgatgcat aacctttctg 420
gcggcggatc acctctcgga ctacttgctc caggcacgga ttctcttgnt ggcagtgtc 480
gcccgttaaa ccggctggca caaggcagta agggctcccc tgggctgana ngnggcn 537
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<210> 8664

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8664

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gttttttgga aattgtttta ttttaaaatt accttcccaa caaaccatga aacacttgga 60
tgttacttta tggtttttca ttgaaaacat actacattgt aaatggtatt tcaaagtcag 120
acatagaatt gatcaaaatc taaggacaat attatgtaag gacaatatta aaaatggata 180
gaaaaagctt catttggtga ggtaaatcta aaggatgcat aacctgtca cggtggacgg 240
ataaaaaagg tgataacctt gtgcttttat tcaactaagg tacttactaa aaccttaggt 300
tttatacagg tgtaagctc ccacctggaa agggacagtt ttctatatta cacctaaatt 360
tactttaaat aactgaagcc caaggaaaca gttgttttaa agaacttaac agtcagatag 420
ctacataatt tagtaaatta aaatcaacta agacaggtga taattggaat gtctcaaaac 480
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tatnccactg ggggaaaata cccctgtccc caatttggag gtggtnaagc cgaccctcag 540  
gaggttgaac aatg 554

<210> 8665

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8665

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ggaaaggcca tcaccctccg tggacggggt ctgggccacc acatccacct tctgaagggtg 180  
gccagacac ctccacgctg ctgactgcac ttcccatcaa aagggactcc ctggggcana 240  
gtgggccgtc cccctacccc cgaggaaggc accctcctgg gcggggacag accttggctc 300  
catgctgcc aagtcaagggt ctggcgtgga aacaggcaca tgtggaacac cacatccac 360  
tgtccaaggt ggagtccacc cctcctcgga gcactcagcc caccagggtc caagcagccc 420  
tcgggagata ccacgcggcc gnccacgtnt caacttggaa aaaagacact tcaaagaccc 480  
caagcttaag ttntcggggg ctggctttct tgggnccctt gggtctggctg gttttcccg 540  
gggtttttaaa aaacctn 557

<210> 8666

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8666

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caggctacag tatataaaaa actctccagc aaaatgatgt gccagcatca gctactaaaa 120  
taaacaacaa aaaaactccg ccataagaat ttttttgcac ttttttttaa aaaaacatcg 180

acacttacat cgctacatct ctaagctacc tcagttctga tttttaaaaa gcacctgctt 240  
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 atacaagttg gaaaatagtc aaacacaata taacatcttt ttcatcccta tacttctcag 360  
 cttaaaaaaa aagtattctt aaaaaaaaaa gitcaataac tgaggcagta ttcctgataa 420  
 ttttatttta atatatatat tttatatatg tatatgtatc atatatttat ggttccttgg 480  
 aaacttcttt ggatgtaggt aagagttcaa caaatattat tggaccccaa caggagtaag 540  
 ccggatggcc caagat 556

<210> 8667

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8667

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 gttaggcgtc aaattagtag tgacaatctt ttttttaatc ttgaaagtec ctagttttta 180  
 agaaagtaga atccatctgg ggcatgtctg catcacaggg tatcactcaa gagtcatcat 240  
 caggccaaaa agactctgaa gggaaccagg agggtttggc ccttgctgtg gaaagatgct 300  
 actgaaagta taagagaaca ccctaatagca cgcgtcaggc acgaaaccgt accatgcccc 360  
 gctaagacat gggaccagag aacacgtcaa cgtcaggccg ctccaggaaa accatccaca 420  
 aagacaacag aagctaaccc gaggtcgaca ctgccatgaa nagtgttggc tgaaacccgc 480  
 agttaccagt gctttactgg acgcgaacat ncctaaggac ccggtgtgct tggttctaag 540  
 catcctgacc cn 552

<210> 8668

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8668

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taagttttata aggaagaaag aacacgagag agagaacaaa tcccatttta tgaacaagcg	120
tgcgctagaa gcagggactg tcaaaggaga cactgaacag tgcagggagg attcatttcc	180
ccaccatata tctgggcaag caagtgtgga ggcagaagac atacagtaat gcaaaaggca	240
tcattatcac agaattttct catgtgtgaa tgagaaagtc tttccatgga tataagtata	300
caataaatca cagtaatcta ataagcaaaa ctgctaagaa aaaggcaaat ttaaaaagaa	360
ataaaagttc aaaaaatttt taaagcttaa atatgtatgt aatgaatttt taaaaaattt	420
attgngcttc tcctgnttat aaaaagtttg gttcttggaa aggaaacaaa ttggaattgt	480
acaggacttt atcttgnaaa tttaccatta aaggctttat cctaaggcan ttccttcaaa	540
aggtntctaa taaaggactt gaaant	566

<210> 8669

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8669

agaattccac tcaatcttta atcaagtagg gagaagtccc cacttaaaaa aaaaaaatat	60
ctgcagtttg aagggcaaag ggaacagtta aaaaaagagg aaaactttat actcgcccct	120
ccccacaga ggttttccaa acctgttgta gcttgactaa aatgttcaga atgtatgatt	180
ttaaaggcag gtctctttat acaaagaaac tgctggcatt cttgactagt gaagaattat	240
ggcagaaagg cccattcttc tgagtctcaa acatgggtcca agaaagcata ttctgattgt	300
agcaactgac cagtcaatcc agagtccac ttacaaaacc cctgccctgt tggctttttg	360
tttccatttc cttccctgag aaaagggcaa tgtgtgggtcc aagctggaga gctcaaaggc	420
ttaagtcitt cccctaaata tatgatatcc cctcctcctg ctccattgaa ttggcacttg	480
atgagcagaa gtcaagtgtg agaaggctga tctgnggcag tcattcncaa gaganccctg	540
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<210> 8670

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8670

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agaaaatata caggacaggg tggagatgag ctcttgaatt tagtaggggtg aaagagttaa  180
ctgccaaccc ggcaactatca ttgtacttgt ttggagaaaa tctgttttgt tctggtgatg  240
atggttttat cttccctttt agttgggtgg gaagtaacag aaaatttgtt tccccaaaag  300
tttgacattt tcttgttaat acacgtttca tttcagtacg atgccaactg ttaagcctgc  360
aggaatcctc ctgggtatit ctgaattgtg ctgtgtgcat gtgtgtttga aagctcaaac  420
agcttgtctt cttacagcat cgagttgttt gctttattgt tagacacaat attagcagng  480
natectttcc gnattcccta ccatngaacc cnttnaganc taaaatc                    527
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<210> 8671

<211> 504

<212> DNA

<213> Homo sapiens

<400> 8671

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caatattcaa ttattaactt taatgtgcaa ataaatagaa aaggaaaact acattcaaaa   60
cagctgcaaa ggaaggacaa gccccagAAC agaaattcct caagaacgga aaagaggcgc  120
tccctagaag catgcgggga tgggagtact gggaggaggg gctcggcggg gtctccggct  180
gcacccgggg cccaggtggc tctgcccag acggccgtgg gccttgtaca ggaatcttga  240
tggcaagttc ctttcttaga aaaccaggat gtgtacaaag tgcctgtgtg acacttgggg  300
agcgggggtg gggagcccag gaggacgggt cagcatcgga atcgcccagc ctggagtcaa  360
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aggcatcagg agcctccagg ttccacagga aacttctaga aacacatctc actttctgga 420  
 aactttgagt ccnactgttg cangatggca aggggtggcgg gtattttngg cctactggnn 480  
 tcaagggccccc nggncaaggg cttt 504

<210> 8672

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8672

cattcaatgc attgtttatt gagtactaac tagctttggg cccaggctct gggtttagcag 60  
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 cagggaaga ctgtagacac agaaataaat atccgattat aagctgtgat tagaggcatg 180  
 atggaaaaga gcaaggcttc ctgagagaaa cagggcgagc acaggaaaac ctctctgaga 240  
 cagtgcacatg aacttgaaac ttgaagggtg aacaggagtg ggcaagacaa aaggggaaag 300  
 aaggaatgtt ccaggcagag agaaagagaa aagaccagcag cacggtatag agccgaggac 360  
 atctgaggaa gaaagggccg ccggggttgg ggccctctgg gtgactggga gaggaaggcg 420  
 ccggaatgga tccagattaa atcggatgct gtgtgccctg tggaaacatg ggggtggcct 480  
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<210> 8673

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8673

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 ggactacagg cgcctgccac cacgtctggc taattttttg tattttttta gtagcgacag 180



ggtttcaccg tgttagccag atggtcttga tctcctagcc ttgtgatcca cccgcctcgg 240  
 cctcccaaag tgctgggatt accgcgcccc gccgaaagtg ttttaaactt ttgtatacat 300  
 gtattttggt gtaagaaagc actcaatcct aatgagtatg cccaacatg acttgtttgg 360  
 ttataaaata taagtatggt taaatttaat gtgaaaccct taagtaacaa catatataaa 420  
 cattaactca aacagatgtc aaagctttgc aacactgagt tacacaaaag cctaantagg 480  
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<210> 8674

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8674

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 ttctggcctc anactctttg gttcanatat cacctgtaca agttatgtga cattggtcaa 180  
 gtcattgtaac ctattttaaaa cctagtttct tcatctataa ttggggataa taacagtaac 240  
 tatgtcataa agttgtatgt acatganatt gcctgtaaag tgagcaacaa tgcctgcaca 300  
 tgataaatta taataattat tacatgttaa taattattat cttcataatc ttctaattgg 360  
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 agataaccag aaaattcaat taaccaaaca cagtcttaag ctatacttca atgatgactg 480  
 ctaacattct aagattctcc acatagtaga gactactntg ag 522

<210> 8675

<211> 351

<212> DNA

<213> Homo sapiens

<400> 8675

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 tggggaanac aagtgtgaac atgaggaana cagggatgaa ggtgtgaaaa cagatgtgag 180  
 gataagaaga caggtgtaaa ggtgagaaag aggccggnca tggtagctca cgcctgtaat 240  
 cccagcactg tgggaggcca aggcanatgg ntcantgan gtcaagagtt cgagaccagc 300  
 ctgnccaaca tggcaaaacc ccgtntntac taaaaatata aaattagccg g 351

<210> 8676

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8676

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 tgtaccagct actctaccta ctacagacta ttttaacttac ccaacaaaat caaaagaggt 180  
 tgctgaccag atttataggg gacataactg tttatattat caaagtgttt gcataacca 240  
 aagtacaata ataaagatga aaatgcctcc tatttctttt agaaaataat acttaataag 300  
 cttgctgcat ctttgatgtt ttactacta ctgcatgaca atgaatatct gatagaaaaa 360  
 agaaatgtat acttgaatta tgatagccca tccatcacag ttaatactaa aaatgaaatt 420  
 tctacagaaa caggaactat ttgacaaaag aaaaaaaaaa tccctcatcc aaacttcttt 480  
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<210> 8677

<211> 528

<212> DNA

<213> Homo sapiens

<400> 8677

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 tggcctggat tatcatcggc tggaaattca tgttggatgc aagtttttat tgataacaag 180  
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<210> 8678

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8678

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 gtgtgtgttt gtgtgtgtga actgtgcaaa gtacaaagga tctcccagtc ggctgagcct 180  
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 gtgtccactg acttcagcca tggctgtgga ctctaccatg ctcctcaaag gaaatctctg 360  
 tggcccccca aggccactac atggctaaga tgtgtacatc atggggccag gatgaaacat 420  
 aagggttagt ttcattctta ccgccaaaca tgtgtaccct ttgaggcaag atggcctgaa 480  
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<210> 8679

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8679

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actcttcacg gtcccccacg attatgtatt canagaggtc catgctcttc agcttcccta 180
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ggccaatccc caagagaaga agcccgactg agccgcaaac agggccaggg tccccanct 480
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<210> 8680

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8680

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cagtgttctc tttttgtgtt tttctgctct attttatctt acaaatggca cataccatca 180
gagtaggcac agtctgacac tgcactcatt atgagagact tattcagaaa aaaagtgtaa 240
ggaataaaat attagcagtc aaatcctttg gttcatcttt tcaaaaaaga tcaaccgata 300
taattacaaa tcattgataa ttcacttttt tggttaaaaa caaatccacc aggtagatta 360
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<210> 8681

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8681

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atagcctgtg tatgttaaac agtagaaaag aaaagaagtt tggggaataa ggtcaaaatc  180
atcgtgcccc atttaaacad cataaaaatc tcagccttgt cattatttac aacccccagc  240
ataactcccc cccaaaagag aatgccaaac ggaaaattct aaataagatg atgtcctcac  300
gtcgacctaa acagtacaaa tgatgcagca tcataaaaca aagttataat tatgttgtct  360
catttcctgg ctgccggatg cccacggtac agagcagcca ctccacagga ttttctgagc  420
tctgagctgt ctggggtttt tgtaagaaca tagctttgac tagcattgac caattgattg  480
catttaaaga ctctgtgatg gtttgagggt gcaaaagaag aattccactt   530

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<210> 8682

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8682

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ctaaatcaag tccattttat ttgaaatttt ccacatgcca cacatgtaca tgaaaattcc   60
catccagaat gtagtttgct acagtgaaca ccaatgtcag gagcaggcat caccgtgaga  120
cgccacgggg gcaggtcagc gggacgggga caggaggtt ggtcatcgaa aggcaggtga  180
tgcatgtcgg gtcatttagc acctggatcat gagatacggc gagaccccc aagtcaggga  240
aaggtctccc cttaaaacca cgtggagctc tgctgtctct gggcagctc acgtggacag  300
gcaatgctca gaaggtggcg aaggggctgg aggagatac caccgacggg ctcaggggga  360
ggggcacgca cacacacagg cagcacatg cttgccatg aacaccccc gggcacacac  420

```

acacccttgc acactcccca cctccctcc accccagaca catcagcaca agcgggtccan 480  
gcttctggct tnactccccg ggaggcttnt gtggccaggg gttcccatgg cggg 534

<210> 8683

<211> 504

<212> DNA

<213> Homo sapiens

<400> 8683

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ttacaggcac atgccaccac acctggctaa tttttgtatt tttagtanaa tcgaggtttc 180  
atcatgttgg tcaggctggc ctcaaactcc tgacttcagg ngatccgccc gcctcggcct 240  
cccaaagngc tgggattaca ggngtgagcc accatgcccc gcctaanaaa tacttttaag 300  
tatattttca ttagctagaa ttgccaatc tgnntaggt taaattactt ggtataggga 360  
gagagaaagc ctatcttacc tgtngctttc ttacttggng gtaacatcca gcagttagtc 420  
tatttataaa cataattact tttcacata tgaaccataa aatatttaac tttctggtct 480  
atatggttgg ctaccgctgg atcn 504

<210> 8684

<211> 520

<212> DNA

<213> Homo sapiens

<400> 8684

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ctctttcttt tcttgccttt taagagacag ggtctcactc tgtccccag gctggagtgc 180  
agtggcacca tcatggctca ctgaagcctt gaactcctgg gctcaagtga tcttcccact 240

tcagcctccc aagtagctag gaccacaggc acatgccacc atgcttggct aatttttaaa 300  
aattattttg tagagacggg atgttgccat cttgcctagg ctggtcttga actcctgagt 360  
tttccgtttc tttgtagtat cctgtttttc atcttaaata cacctcaaat ctctctggag 420  
atggaattaa aattaagtta ttctttccac attggctttg tttccctcag agtttgncat 480  
attttcaagg cccctaattc tacctcgggg actttcttat 520

<210> 8685

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8685

ataatttcaa aggatacttt ttattctgct ttagtttaag gtgacaagaa gctattttaag 60  
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aagacaattt agaaacattg ttttacttgt cttcacactt tggaggtaga aatcatgaaa 180  
cattaatctc atgattacca taattatgct ctcaaacagc ccaagtgaaa gaacaatcat 240  
tctcacaaaa tgggtgccata atggttaaag cttaatgtct tgctaattgat caagatgtat 300  
acacaacata aaataaatag aattgcttgt tgtctgctga agttcttggc aatgctaagg 360  
taagttatca ttttactctt tccagttctc aatagccagc cctcaaagag caaggggtgg 420  
taggacaaca ggaatgagtg gaaatggctt ctctggcgga tccctcctaa ctgcagtcac 480  
tcagtctagc aggctcaact tncactgggt cttctgggtg accttg 526

<210> 8686

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8686

agagatttaa cttttgctct gatatttcaa ttataaggct aaacattatt ctagngttt 60

ctgtgagggt gttttatatg anattgacat ttaaatacat cagtgaactc tgagtaatgc 120  
 anactgtcct cctcgatggt agtgggcttg atccagtcag gtgaaggctt gaagagaaaa 180  
 aaagaccgtc ctcttcccag aacaagagaa tcttccaaca gatacctttg gactggacct 240  
 tgcaccatca gctttcctgg gtttccagcc tcttgcctca cactccagct tttggacttg 300  
 ttagacttaa taataacaac acaagccaat ccttttaagg aagtttgtct ggagaatctt 360  
 gacaaacaca aacatctact gagagttcct gtccaagttt tgctcacacc ctagcaagag 420  
 gcttctggct taccagttgg gagtgtgagg ttctttgctt gtaagacctg atccaccagc 480  
 ggtacaccag ctnttgcccc agggcaagaa cang 514

<210> 8687

<211> 512

<212> DNA

<213> Homo sapiens

<400> 8687

agcagtgcaa aaattttatt tctgnttccc ctccccacca ctttacaaga tgtaaaattt 60  
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 gaaaaaaaca ctaatcaatt aaaaatatcc gtccctcttc cccactgcta cagcaaattt 180  
 aggataaatc tacagcattc acttacttta gctggttctg atactgagga atactttttt 240  
 atttgagaat caacaccta agacttggct aattgtacag catttgaatc atcactgata 300  
 agtgttccaa gagccacaag aagtctaaaa gtggcttcta ggtcttgnac tacttccaag 360  
 attngtctaa ttagtgacaa acattgggct ttcccttcaa tgttatggtc tttatgaaaa 420  
 caaacagaat agttcagggc caatgtagcc agagcaatgn gaatgntctt attgctccct 480  
 gatttcagtt ctattgcatg ggacatcagt ga 512

<210> 8688

<211> 480

<212> DNA

<213> Homo sapiens



<400> 8688

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aacaggacac ttaatttgct aaactttatt ttatacatat acgtttacat ttactagtca 60
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acagttacag gctttgggtct ctccaagaat ccaattcacc cctgggtttc gcttggcaca 180
caccccagga gaacgtcgat gcacacagct gtgtagctgc aaacggaaac cactctcttt 240
tctctcgtat ttttcagtca gactcactca ggattttgaa atgaatcatc acgagaaatt 300
tgttttaaag ttgaatcact gagaacatct aacaactggt cacattcttt atcacaaaaa 360
ctgaagtcgg aaaagacgcc ctgaaaactt gcaagggcta atactctatg atagaatatt 420
actactgttc accatgntaa nacatttact tactaccata cncctgaaca gncncggnan 480

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<210> 8689

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8689

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cctcttttaa aaactctatt tggtgcgtgc ccacgggtgct gcgtcccgtc agacatacct 60
gtatagatct ctctatttat atatatatat atataaaagg ttcttttagca gttaaataga 120
ttccaatatg aacgtctccc aggacaaagc tgcgtctcgc ctctgggtca cacgcattctg 180
tgcggctggg gtgtatgtgc cgcgtcacag cagtaccata taaatacgtt gatttgaacg 240
cagtttccct gtggnggtaa aaacacattc ctgacaagtg acaagcagaa gagtccggca 300
gctgcagcgc ctcaactcggc tgggacctcg tacttgaaga tgacgtgaa gagccggccg 360
ccagcccgtc cggccagcca cgcgttcttg atgacggcca gcttggaggt tttcgaacgc 420
aaggctngct gggaanttgg ggtganagga acgggccatg gccttnatga cnccaaate 480
cggccaagnt tccggacaat gn 502

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<210> 8690

<211> 468

<212> DNA

<213> Homo sapiens

<400> 8690

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gatagccaaa agcaatttat tatagtttag cctcaaaaaa ataaaaataa aaaaattatc   60
cagnggttat gaggagtcta ggaaaacctg tcccagtaat gccaacttgg aggtgaaggg  120
ctgactgggg cagctganaa gtgggacctt ctgtttggca ggcttcctct cccttgcctg  180
gtcatggttt tctggtgaga agagtgttcc tggccttgct ggaggttccc atggccccga  240
actaacagtg tttttctgaa atttcgacct gcaccgtttg agagagtaga attccctcat  300
caagtcctcc acctcccact gctcttcctt cagcctctgg cagcagtgca gggcggcagg  360
gtcgatgggg tgagcttctg tgttgaagat gtacccccca gccccagga tgcactcccc  420
atagggggtg atcaccngt cnaaggtgga ccnnttggtg nggannaa                    468

```

<210> 8691

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8691

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aattgctaag aattttatgt agcaagtttg tttattcagt aacataatca caaaatagaa   60
atatcacatt cacagaagtg gaaataaaga gcataaaata tttttaaac aggaaagcaa  120
tgggatcact ttcaagagcc tcaaagaaaa cctttaattt acaatgctac gctttcatga  180
ttaataggat taatgtgtgg ttttctttg ataaaagtag tcatgatttt ttagtattac  240
atacattcat tgcatatgac agacactctg ataaaaatgt actgttctaa ttacttaatt  300
gttttggtc atttaacacc ttgtttaaat agctttaaga catataagag gcaaataatt  360
atatatactt aaggataaaa tttcagata tttatccaaa cacacattta cccattaaat  420
tagaacacca actgcttaat atgtaaaact agtttgaaat catgactctt gattaaatac  480
atacttcaac atctctcatg agacttccca acttcaaaaa tga                        523

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<210> 8692

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8692

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aagttttcat ggttttaaca tttattgtaa gtcctagatg aaacatactg aaaagattat 60
ttttgcttta atcctaatat gctaagaaaa gttcattggc acaaatatcc agaggatatt 120
tacagtttca tttacctttg gtggcaaaga gtattttgct aaccgtatgg atacagtcag 180
atagtttcca atgcacagct ttatgctaaa gagaattcaa atgtgtctct ttttttgct 240
aaaaaaggga tgtaaaaagt ccaatatgaa acagaacgag tgcaacacga aatacaaaat 300
atgcctatca tgtaggcttt tgaacagtta atagctctac gtgttatcta taaacatttt 360
ttactagtaa catcactatt gtataaatat taaaaacaaa aatgacatta aaaaaatagc 420
atatgaactt tacaaaaatg gctactttna gnttccctaa ctaaaatcgg aattcaaatn 480
cncaancaaa tttncctacc taatcaaacc cncaccgg accggttttt 530
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<210> 8693

<211> 498

<212> DNA

<213> Homo sapiens

<400> 8693

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aacagaaaaa agtcaaatga caattttaat agactttaaa acagtgtaca agtaaaaaac 60
actggttttg tatttcaaaa gttgaaggaa gatatccagt cattaaacag tctacaaaac 120
atatgccagt aaattacata aaagactatg tacaatataa aaagagctga aaacagtctt 180
cactgtaaaa ataattttaaa acaaactttt caattttaaa tatcatctat agcacacaaa 240
catcatgcaa atggaaaact aaatatactg cattcttttag ttagccaaa taaattcaga 300
ttgagacatc ttataagtag ggaaatggcc attcaatacg attttttct ctggcagtaa 360
tggtcctagc tgggtgtttt atgcataaag aacagctata tttcaaacc tttttattgt 420
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aataaatact aaagcaacag aggaataactt tattaattta ggagtgatgt tcaaaaatgg 480  
nctgaaaaat aaangctn 498

<210> 8694

<211> 518

<212> DNA

<213> Homo sapiens

<400> 8694

caaataccat actataccca attttagtca atttgtaaata tataaattat attatttgtg 60  
ctacagtttg tgacatttaa atcttattag aagataagca ccaaacctat taaaataaaa 120  
aatagataaa atgctgtggt tttcccagca gcaggatatt gtgtacgtcc tgtaggctgt 180  
aaacttatgc tcccttctcc tgaaacaatg tttttgataa acttgccctt ctcccttgaa 240  
acttttcctg aaaacagact ttgtctttaa ctgtagtctt ggaaaatgta caaaagagca 300  
aaactgcccc tctcggcggg acggccgcat gttacagaaa ggcttcgtct ctgctgctga 360  
tgccaccacg agccctgccc agcgttcacc aggagggcgg gctgcggccc ccggggctct 420  
ggggagggtc tcactcagag ggtaaaaagc tccacagaag agtcacccca gagcacctgt 480  
cggagaccct gcgtcccttc cctnangggg ctgnnaan 518

<210> 8695

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8695

cctcttggtt atttggttgg tccagctaga tctcggaagc cactcgaact tttcgggaaa 60  
gtatttgga atttcaatct tctccacggg aagacgatag aaatcgga ctctctgcct 120  
caggagccg gcagtccac cctgggccgc gttccacacc aggtccagg caggggcata 180  
ggtccttca ccagggatgc gcacctgtgt cctcagcagc acgtcctggg ggcccaagtt 240

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 tctgaggtgg gctggggacg ggacaccgaa ctccaggaaa ggaggcaagg tcatggcctg 420  
 agacttcagc tccgccagcg tggcatcttc tgagatctct atgtctccca agtagaggag 480  
 agaaacttgc gcaggcttcg ttcccagaag caccttggct ggaagtggct n 531

<210> 8696

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8696

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 ggattctttc atgagaattt cactaagaaa acaatagttt tagtctcaat cccttcatag 120  
 ttggaagcat aatgttcctg aaccctccac tcccagatat agacaaatat ttcttcttcc 180  
 aaagcagtaa agaggtctag atgagctgct ggccatttag gggtagaggga ggcatttgag 240  
 ggacttgggc ctggtcaagg agtaataggg gtattcccag gagctactaa aggctggctg 300  
 ctgagctcct gaacagggtt gactggtggg gatccctcag ggccgagacc aggtggcgaa 360  
 cccgccgctg ctgttgcagc caatagagca tctccacttt gtcactcttc atcttgtcca 420  
 ggtagggccg ccccttgaaa gaatcactgg cttegcccaa agattaactc tatctcctta 480  
 nganggaac ccaagaagac tcnnttaagt tgaactttct gnngaaaagg ctttcg 536

<210> 8697

<211> 507

<212> DNA

<213> Homo sapiens

<400> 8697

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tgctttttct ttaggaaagn gctcacactt tcagctgcgt tttctacagc tcctaacttg 120  
aataaaaaaa atagngcagg taacttctcc attttcctta gtttttcaac tanaagngga 180  
aacatggnga tcatgttttc tggactcaaa tctgcttcag gactaanatt ctgaagtncc 240  
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ttttctgggc ncagttcctg ggcccagggc caacttttcc aaatttgaaa catggcatca 420  
tacagctgga tgctttctcg aggtgaaagg gtaagatcag gaggggaatc catacctttc 480  
aatatgatcc gttggtagtg cagcnca 507

<210> 8698

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8698

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ctatcccctt ggtctttcag gnggtccaaa gccctccag gatagcacag tgcttaggct 120  
ctgctgggcc agaggcaagg gagacaatct atctcccag cctgccctgg ccagtcctt 180  
tcctgcccc taccacccc tattgcacat caaatcatgt aaacatggct atggggatgg 240  
cccanaacag cagtgaggca gattgatgtg taaacagatt tgggatcagg ggctagaccc 300  
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gtcccaaac tctggctcan attatgcaat agtgcanatg gctctgctcc cctctgccac 420  
ccacctctc agattccagg tcctgaggtc caagtagcct tgggcttccc tccaggccta 480  
ggcagcagat ggcagtgtcc agttttttcc ttc 513

<210> 8699

<211> 434

<212> DNA

<213> Homo sapiens

<400> 8699

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agtttttttc tctttatttc ttatggataa aatgcgacat acatattcta cttacaatg   60
aaagctgatg ggacagaaga atcaatatta gcttttgaga tgggcaaaga cataaaacat  120
tggcgttttc tagtgtcatg atttgtcaaa ttagtttttag aaaatggtaa atgtctgaca  180
gaaaaaaaaat ttttaattaa ggtgtatgta agtgtgtaaa actgttaaaa atgcttgaaa  240
acaacatttt taatcccatg acatattatt tttattttgtg gaaaacagct aaaaactgcc  300
tgtcagagaa actatttaat cctttaacat aaagtctttt aaggcacata aacatttatg  360
aagaacagtt gaaatatgct cgctaggaag aaggnnccatt ttaactcata tgagcattca  420
gtcaagngaa nncn                                     434

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<210> 8700

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8700

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aaagtftatt catgaatggt ttaatttccc tttaaagcta gaaaataaag atcatttacc   60
ttctgatctt cgttttttcca aatggtaata agcattgatc cttccctcta ataaagggtga  120
aatttttaaa atctcagtga ataggaatgt gcaaagctct aagaaaacta ttacttgaat  180
gtctctaaag tggtagaaga tcacaagttg ggaataccct caaaaactat atttttaccc  240
tactgttaaa acttgttttc aaagtgggtg aatctgaaag atcacagttc aaaagtaatt  300
cccatacca ataatatcaa ctttaggtga acatctaagt atttaagagt attatttttc  360
ttggctgggt gcggcagctc acacctgtaa tcccagcact ttgggaggcc gaggcaggcg  420
gattcaggag tttagacca gcctgacca catggtgaaa ccttgnctct actaaaaata  480
caaaaattac cggggcttgt tggctcacac ctgtaatccc agcttctcag gcggctgacc  540
ntgagaatcc tttgaacca ggaggcggaa ntgcatgagg ggaa                               584

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<210> 8701

<211> 588

<212> DNA

<213> Homo sapiens

<400> 8701

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gctgagaaaa ggcaatgtat attatagttc tgtggtagta ctgataacat tcaagtcatt   60
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ttttgagaaa aatctaatag ctaatagtct ccaacaccat atgatcataa tccttttagct  180
taagtagaga tctacttatt aaatgaggca ccatcaacct aaggaaagat aagctgtaag  240
agaatgaaga cagaggtata tcaagtaaca agaacattct tccttatcag gataaaatgt  300
ttatcagtat tcaaataaaa tatcttaa atgaaagagac aggaaagaac atggttaaat  360
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aaggnattac cgtatccaat acaaggatac ttaatagacc naagaattta aaatcccagg  480
gaactggaat accagcccca aagaagcccc tctttgtggg ggtcacaccc caaanggcatt  540
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<210> 8702

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8702

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gcaaccatag tgtgaacgtt cagcattgca tactgaaaaa ctttgaatct catgtaagaa   60
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ttgttttcct acctttatta ccagcgtag ctgtaatgag gattctagaa aaaagagctg  180
gaaaaaagaa gcatccccta actcccacaa tgtagcactt cagttctggc ctcttttagga  240
ttggggcagt gtctcatctc tttatttgtt attcgtagac agtaagaggg agtctcactt  300
actacttgga aaagttttaa agaccttaata cttttgtgtg tgtgtgggaa ctaggccaca  360
aaagtgcatt atgaaagagt ttccttacga tcatgtccgg attcaaattt caagtagttt  420

```



gcatgatctt catgtaatat ctgggacaca ccttcataat tgacaagcct tttttttata 480  
 taataataag aatggctaaa tggagtgagg gatatacttc attccgcccc atgaccttat 540  
 cttttcaggn gggaaatcaa tggcnaaagg aaatgggtctt tccaggn 587

<210> 8703

<211> 578

<212> DNA

<213> Homo sapiens

<400> 8703

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 tctcctcccc tttccctttc cacgagtttt caagatgtgg ccagtcagt gcattgctgc 180  
 cttctatgac ctatgaacca tgggcagcaa gaggactggt gaccggggga catggtgagg 240  
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 aggtcagct ggaggccgca cagaggagaa atgtcactct gtcccatctt ccttgcattc 360  
 agctgagctc agaccaagtg agcacctaag aatcatttac ccccaaagga tgtttcaagt 420  
 gagatgcaat gntctctaac cattattctc ttagaaatta aggggtggcgg ggcnggaatc 480  
 aaacnnatgt ttgaaatggc tttattctc ctagtggcta atgctggtct tgggtttatt 540  
 tgcngaaata aaccaaagt gnantaaacc accntcan 578

<210> 8704

<211> 505

<212> DNA

<213> Homo sapiens

<400> 8704

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gagcagctgg ttggaggag ccagggccag gccccacctc ctctcgggac caggagactg 180  
gcagccgctg tgttcacctg ggcagggtgtg caccacagtca cccccactgg attatgggtgc 240  
tggtagcatg agagggtgtg tccacaccaa gggcagggtga agatgcgagg tggggctgag 300  
acctccttcc cacaagagga ggtggctgag cctcccaggg cctgaactct cacagcaggg 360  
ctcaccccca agcctgtatg cttagctctg actctctttg gacaataaaa taaagtgcac 420  
tactgaacaa agagtaactc aaaaccagaa tcagacaaat cgccangntt ttccttagct 480  
naangacnaa ngaaacntga atgat 505

<210> 8705

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8705

gggggaggca ggccatttat tgaagaactg cttgcagaca tggacacaca cagccatggt 60  
aaccagacgc caccctgggg ccaggagca cccagaaaca gccctgggct gccagcccag 120  
gcctggacat ttgcccacca cgggtggagg gcctctcttg gcatcaacca tccacgacct 180  
cctacggcac catctctcct gccaagtgtc ccatgggggt ctccaggaag aaaaccagcc 240  
ttgggggatt ccaaggccca gggagggtgg gaagctgccc acgccctcag gctgtgcca 300  
gtctcatgct caccatttct ttctatggcc aaagggaagt cgctggacga gggaggtccc 360  
tctgctggga tgagcagcac agcacggctg gggccccagg tcacagaaat ggggtgcaggg 420  
atcctgggac ctgggctgga tgggcacccg ctttgggatt tcctctggtt aacctgtgta 480  
tggtccaagg aacantgtag gaangggctt ggcatgtggg ggggcttgca tgtccgggct 540  
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<210> 8706

<211> 529

<212> DNA

<213> Homo sapiens

<400> 8706

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ggtttcctct gtcactttta attaagacac aagttgagta agcagcctcc acaggctgta 60
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tgaggagtg agactgggtc cacagtgaca ttattgctga cctcttctgt gtgaggaaaa 180
aggccacgag accctttgtg gggccagccc tgagtgtcc tctccaagt ttttaaggcag 240
ggagggggaa ataactgtac agccctttta gccccagct ctggagtggc agacagcaat 300
gaggccacat ccctggagct gcccggggga agtgggtgag gaaccaaagc cgtgggtccct 360
gtagagcaac tgtggggagg ggagggccag tcccctgctc agtcctgacc acataagcct 420
tggtcacagg tgtaggtgga nagggcactg gcggacactg ncctaagggtg catcctgagg 480
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<210> 8707

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8707

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atgtaaaaaa gaattgtatt cttttacata gatcaacaca aaacagtaca ttgcctttgt 60
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attttatggg tcctcaatta ctgcagatag acagtacagt aagagacagt acagtaagaa 180
ataaaaaggc tgaaaggaat gttttggaca ttataggagg cctaactttg ggtgggtgtag 240
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tgacaaggta gtcacagact tctggaggag ggtacttggg ctggtgtcta cctggcatat 360
ttaggaacat tccataacga gatgtaatat cagcacaatt gattatttag cccaaggctct 420
cagtcagttg atggctacaa gtgttaagta ccacaagccc cacctctatc tctgtatgtt 480
tagagtgcaa atattttccc catgcttctc gtcccctant cactgccacc ccccttcggc 540
cttccttatt cttacaggac ttaacagctg gcacctanaa ct 582

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<210> 8708

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8708

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gggtcttggt ttgatccaaa cattgatgtt ttaaagggtg tacacaatat ttgttaaaaa 120
gaacatataa aaataccttt ttagaagcct ctataagaaa gaaaatacaa agtttaaccc 180
cacaactttc ctctttgcta gaactgtaaa ctactgctac agttttaaat agactttttg 240
ttgtttaaac tatacatcca ggaaaatcta aaaaaattaa agaaacgtgc atataaacga 300
ttgcatagca gaacatgaac attaactgca aacagtaaag aaatgaaagt tagaaatact 360
atcaaataa caaaggttct agaatcaatc ctttaaacac attccacaaa cagtatttaa 420
aatccatcgt tgtattcttt acaggcaaag cctagattac taaaaccgaa attgaaaaaa 480
gtaatcctct aaaagggaat cgtttgccat aattcttact tgnatctgta agcagcaatc 540
tgagatttta aaaganctac tttttattct gaaangaaat ggac 584
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<210> 8709

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8709

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gagatggagt ttcgctcttg ctgcccaagc tggagtgcaa tggcgcaatc tcagctcact 60
gcaacctctg cctcccaggt tcaagcgatt ctctgcctc agcctcccaa gcagctggga 120
ttacaggcgc ccgccaccac gcctggctaa ttttgtattt ttagtagaga tggggtttct 180
ccatgttggt caggctggtc ttgaactccc aacctcaggt gatcctcctg cttcagcctc 240
ccaaagtgct gggattacaa gcgtgggcca ccacgccaag cggtgaatgc ccatttagtt 300
gtattcataa ttcccgtgcc atgtgttcga attgaattag caatatgccg aatattaata 360
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gtattcaaat gcttggttatt gcttggtcgt tcaataaaaa tctgattggt gagattatag 420  
 aggtatcggg acacaaatat atgaatgttt ctcataatct ctaaaacatc aaggccctgt 480  
 tccaaagtct gactgggaag atgtgcctct gcataaccag ccataacgct gagcagctta 540  
 agttctcatc tcactataag tggncaccg 569

<210> 8710

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8710

gaggagcaaa cgcggctcat ttattagaat atgcaaaaga gaggactttc ctccacaaat 60  
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 gagaagaagc aaaaaagtta tcagtttaca aacaaggata acaggtgatt tcaacaaaag 180  
 ataagaaact tttttttcca agaatacaaaa tttcaagtat tattccanat gacatggcaa 240  
 agctagcaca ggcggaagcc aaggngcccc tcaggctctg tagggtcttg gaggaagggc 300  
 ccgggcagca tgaggggagcg gcgcgtcctg ggacctgcct ccagccctgg gcttggggcc 360  
 gtggtcactc acacaaggga gcagcacgtc ctgggacctg cgtccagccc caggctcggg 420  
 gcccgcggtc actcacacaa gggagcacat gtcctgggac ctgcgtccag ccccagcttn 480  
 gggccggggc acttaccggt aacaaggacg ataacttgnn ggccccttga gggtacaagt 540  
 tttggncttg gaaggtt 557

<210> 8711

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8711

cagagaatgg cactttattt ttaagacttg atttttttgc catgattatc taccaattct 60

tccatgatgg tgtcatcctc ttcaacagtg accaggacct tcttgcccac tagattaaag 120  
 atgtcttcag gaggatagcc tttgggctca cccaccttca cggtagagcat gtccattgtt 180  
 agaatggtgc cticcgggaat tttcactttg gccaccacag acttgcccag ctctcattg 240  
 caggccatct cacagggcag cagctgcttg gttggggagc ccagggcacg ctccacaaga 300  
 cgcactgacc gcaccagctc ggccagttct ccaggctcca gcgaggccga gtggtcactc 360  
 cccttcagg tcttgtccaa agttatgtga cgttccaaca ccttgggtccc cagagccact 420  
 gcggccacag atatcgctat gcctgtttca tgcccagaat accctatggg aatgtcagga 480  
 aagagcttct gatnttccna nannaccnc ang 514

<210> 8712

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8712

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 aacatattta ggtccactca tagggaggag gaaaaagaaa ttctggcata gcacaggggt 120  
 caggaaacta tggcccacca cctgtcgttg tcagtagttt ccctggagcc cagccatgca 180  
 aatggttgac atgctgccga tggccgctct gcagaatcgc tgggactaag accacaggtc 240  
 cagaaagctt caaatgggta ctatcgggcc ctccacagaa gtctgcccac tctccataca 300  
 gcatatgatg aaatacactg cattatactg aatattgaaa aaaaatatac tgcagctact 360  
 gaaaaataaa cacaaagtgt atatacaaac agggaaagat gttcaagaaa tcatgaagaa 420  
 agttttattt taaactctgc ctggcttctg agggccacaa ggccccgtca attinggttcc 480  
 tanggttcca tggagaaagg aattgaagtc tttggnaaaa ttganccttg ggangggtaa 540  
 cnaggacttt gggcacantg gttaacgggg tcccaccgg n 581

<210> 8713

<211> 440

<212> DNA

<213> Homo sapiens

<400> 8713

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acagctgggc caccgggggt gacatcacgt attggtaggt ccatgatgcc cccctgagcc 60
acaaaaccag caagttttta ttagggattt taaaagggga ggggtgtatg aacagggagt 120
aggtcacaaa gatcacatgc ttcaaagggc anaaggcaga gcaaagatga catgcttctg 180
aagaaacagg accagagcaa aatcagaaac tcctgataag ggtctatgtt cagcgggtgca 240
tgtattgnct tgataaacat cttaacagaa aacagggttc agagcaaaga accggcctga 300
cctcaaattt accaggactg gggtttccca atcctagtaa gcctgagggt actgcaggag 360
accagggcgt atctcagtc ttatctnaac cacatnggac agacactncc anagnngncg 420
tttatanacc tccccagga 440

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<210> 8714

<211> 440

<212> DNA

<213> Homo sapiens

<400> 8714

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ccatgaaaaa gattccactt tatTTtattt attattgtta ttgttatttt tacaacaat 60
anatttgctg caacatgctc tggctcatat tattgaatna aaaaatttaa cacatttcaa 120
aaatatcaaa aatacactat aatgagtctt aagactacaa tacgacaatg attgcacaaa 180
accgtaagat atgagcccac tgtctggatg acatccattg gcaacagtga gagaaaaccc 240
tatagcatct gggagaagtg catgaaattt agaatncaag gaacttatgt gtgactgact 300
gatcaccaaa tgaggcaaac agagcaggat tgactgtagc tgctttttct caatctagga 360
agngcttacc ccaactatgg ggcaaangtc actaactgga aanattaact tgccttnatg 420
atngggagtc gnaangcctc 440

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<210> 8715

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8715

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ataataaaga atatggtaat tttaatgaca aaaattgtat tngaaatag cgcactctat   60
actgagatga atgaggggaa aaaagtcaaa actcctttca aaactatatt caaagcatca  120
gaaaaaattt ttttttcttt ttacaaagtt atgtataagt catagggacc accaaatact  180
gaaatatgaa gactctatga ccaaagttca aaactgattt taaggaactg tgtgaagcaa  240
gacaggaaaa tttgtattta acactctata gaacttcaca gtaaagctgg aatttagaga  300
ctaattggctt aacaggagta ctgccaacaa ggcctttcct ttctcagaat catctcctaa  360
tattcgtata ccattgacaa gttgtaacag cagacttaga ctttngttt tcttaagatg  420
gggcttaata aggtgcacaa atatgctgat atcctgnatt atgagcatgt aaattattct  480
caggggttaa gaaaatcccg aaaagaatgt aagtntctca gtccacggct tgcntcatca  540
acaaaaggnc aggn                                                         554

```

<210> 8716

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8716

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aaaaaaacag gaccagttt actactgaag ctgcagcgag gttacagagg cgtcttgggg   60
ctcagtccct gagctccggg acgccaact gggagtgggg cctccactct cctacgtaca  120
gacaccccca tagggaaacg ctacatgct gtcctgctgg gacgctgcag gcctggccgt  180
tctgtggccg catccgcgtc cgggtccctg tgcctggct gggcgagccg gggagggggc  240
tgattcctgg gagcggttca gcagcgagtt ctgaatgtct tccaggactt cacggaagag  300
ctcctctcgg gacttcatgc cgtccaggta gaccattcc acaccgttgg cctccatctc  360
ctgcctatac ttctggtaca tgggccacac gtggccatcg aagaggccgg ggggatcagg  420
gactgtgtag ttgcgggtac ttctcctcca ctgcactct tcatacggga cggtcaggaa  480

```



gtaccggcgg ctgtacaagt ccaccagggg cttgtaactg tagagcagga agccttnca 540  
gaagaagatt tnggtgtccg aggccttggc tgacctgacc cc 582

<210> 8717

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8717

aaaattatcc aaatgtgaac ttactggaaa gagaaaaaac aagtttaaag aagaaatttt 60  
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ttataaatgn gtaagacaga cagcatttac tattgagtc tacagggaaa cacacagaag 180  
caattcattg cttgggagtg aaactatcaa ctaatcttac gactactggt tctccaagtc 240  
ccctaataaa gaaaatttta acctcatgat catttcaagg gaatttcttt ttcaactgnc 300  
acataataac ttggtaacnc aggaccaata tacatgttct gagttttaaa aatatactcc 360  
acctaaacta tctgnctagt ttaatctttc tagttatcat ttaacctaaa atgagagacc 420  
aaatcttatt tccattaaaa aaaatgaaaa aaaggcccaa tgganctttt tgaaagnng 480  
taaaccctgg ggcttaaac aatccgntt atcaaccctt ttgnccaaaa aaacggttgg 540  
cctnttgat taaaaatggc ccnccc 567

<210> 8718

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8718

agttttctat caaccgagaa tgtttttatt acccatcaa tcctgaagga tcatttcacc 60  
aaataggaat ttggagtga cagagtttg ttttgaggca gtcttgctct gttgccagg 120  
ctggagtga gtggcaggat cttggctcac tgcaacctcc acctcccggg ttcaagtaat 180

tctcgtgcct cagcctccca agtagctgag attacaggca tgtgccacca tgcctggcta 240  
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 ctgacttcaa gtgatctgcc caccttggtc tcccaaagtg ctgggattac aggtgtgagc 360  
 caccgtgccc agccacaagt tgatagttct tctggcacta aaagaacttg tctcacttcc 420  
 ttctggcctc catggtttcc agagagaaat ccactgtcat ctgagttact tttccctcta 480  
 gttaagattt cacttctttc ttganctttc aacttttttc tggctttaag ttttcaaaaa 540  
 tctggcctat catggacttn ttggggttac ttacttn 577

<210> 8719

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8719

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 tcacaaccaa cgtagtaaac atcatttgca tatcagtaag aaaaagaaaa caggaggaga 120  
 tgagttctta caaaacaaag cagattctag agatttcact gtgtctgcat tgctccttcc 180  
 acgcaagttc tcccttagct gaccgcaatc ttgttttctt ccaggaagtg aggaaactgg 240  
 tgtttgggaa cgccgtcagt agcacttggg ttttccacat ctgcactgat acccgactgg 300  
 gagccatcca tcttggagac agtggcgtaa ttcacaacgg aggtggcccc caaggaaacc 360  
 gggagggtag gaaccccccc actctggatc acagagatct cattggtctt cacggccaga 420  
 ccgccattga gcatgctggg gtactgggtc cacacaacag ggtccacatt cactgaaggg 480  
 gccnggaatt ccttgggnaa gaattttggg actctttttc cgncccnacc taacaaancc 540  
 tnggggtctt ganggccact tc 562

<210> 8720

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8720

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caggtttgca nagtgggaagt ttaatgggac catcacgng ataccccatc acagcagtcc 60
caggctggag gccccaggct ntggccgcct ntcccagcat ggngggcctg ganagagcac 120
cagcaccacc tcccactttc cctgggggtat tgctttgccc ctgtgcctcc cccccagga 180
agctacaana nacaggctgt cctgtcccca cactntccct gggtcctggg actccctgtt 240
ctgaggggct aaggttgcct ggggccanag ggccctcccc agggacaacc atcctntccc 300
tgngtccctt gccccccaca ctgagggaat gtctgtgtcc ttgttctctt gccaggggcc 360
aactgaggct gccaaaccca ggggcggggt gcaagggtctg tgcggggagg gtggctcana 420
tccctgcaag gaggcntgct gcaggacag cacaccttgg gcccccggc agacattaag 480
gccaatgtgg cggcaccaat aggttgttg ggcccttgcc ccggggcngg aacttgaag 540
ggcttgatt ccggggcttg gcccaattta atttt 575
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<210> 8721

<211> 475

<212> DNA

<213> Homo sapiens

<400> 8721

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ctctaaactt ctcttctcac ttcatttcat ccatttgatc ttcaattact gatacctttt 60
cttcacttg attgaatcag ctactgaagc ttgggcatgc atcacatagt tctcngcca 120
tggttttcag ctccatcggg tcatttaagg ncttctctac actgttnatt ctagttagcc 180
attttgtcaa atcttttttc aaggttttta gcttctttgt gatgggttcg aacatcctcc 240
tttagcttgg agaagtttgt tattaccgat catctaaagc cttcttctct cagctcgtca 300
aagtaaaagt ccagctttgt tccattgctg gcgaggagct gcgttccttt ggaggagaag 360
aggcgctctg atgtttaaaa ttttcagctt ttctgctctg gtttctcccc atctttgngg 420
ttttatcnac ttttggcctt tgatgatggt gatgnncaaa ngggttttgg ngngg 475
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<210> 8722

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8722

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gggaaggagac aacggttcta cgattaacaa caggaactga taggaaccag aagctccaag 120
gatttaaaaa aaaataaaat atatatttat acatttatat atatatatat atatcacgtt 180
atgtatgtga gtcccagaca agcaggaagc agcagcaaga agcaactagc acacagaaac 240
accctgctgt gtgcactaca cattcaagca aagccattcc tctagctagg acgcagcaat 300
ccccaccctc ccacctacgg gcaaaagaga acagctgaaa acaaacttcc ctctttaagg 360
gccactcagt aatttttgtc ctcttgcca ggaaaaagaa agaaaaacaa aacaaaacag 420
aaaaggtcga tcttgccttg aaagcgcca gnggctatct ctctctctgc caaagcagga 480
cacgtattct tacacagang gccacatngt gncctacaa tncctanaca gt 532
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<210> 8723

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8723

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agtaataaaa gaatcattta ctattttcac tgagtttaca gtgttgggta ctactgntta 60
catcatttta atgaaagtat ttataaaaac atctgcaata gttcatatca gaaaacaaag 120
tttctctcaa taaagacctt aaaaaataaa tttttatctt cattaaactcc ctttctggga 180
atgggaatga aataacatgc ttctgtttta aaaaaaaaaa aaaaaaaaaa ncnaaaattt 240
aataccctaa ttaggtttct ggaaaaaaag actaccctag caataatttt taacattcta 300
catttcatct atttctaaag acactccctt tacaaaatct tttagtttta tatattagga 360
caatcagggt tanagtctca cataaataaa atagccncat tagaaggcat actgaagaat 420
caaatgggtt agccacattg gctgntccat tcacggattc tctaanance gttgggagga 480
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gcctataaaa ctggtcacgt tagctaagta aaagggcnat ctgaccatgn tctacacctg 540  
ngctttacaa aatccgattt ggggcccgg 569

<210> 8724

<211> 461

<212> DNA

<213> Homo sapiens

<400> 8724

ggaatgtcac tagacaatta aacttttatt gaagcgtaaa ttgtggtaca gaaatacatt 60  
tcaactgatt taagtccaac accagtgaag ggagaaatta tggcaccaaa actttccctc 120  
ttctatcata cgatgattta gattatgatt caaactacat ttctcttttc taggctttgt 180  
cccataaaaa tttgtgcagt ttttcaacat tagaattctt aattctattg gaaacaaaac 240  
aaaacaaaac aaaacaaaaa caaaacaaa ccagacctca agtcaacaaa tctattggga 300  
tattgtttac gaacaaagtc caccttaagc attggctcctc aaaacagagc tcttcaaaat 360  
attaggtgct gngctcatta cagaatcaaa ctgacacact gattgaaaac ttcctcaatg 420  
aaattttcaa tcaacaacat gctnnaaata aaagnnaann g 461

<210> 8725

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8725

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acgggtctaa gcatatagac aactgttaaa aagaaataac atgtcataca gtttgtgaca 120  
ctccacagac gtttttgtac ttgatgaag aatgtggata ctacaaaaga aaatcagggt 180  
ttaacaaaac tcttacagaa atgacatata caatatattc atatatatat acacacgcat 240  
tgtgtgtgac aggttgggat gtgtgtgagt atatatgaat atattggtgt atatatatat 300

ttacctttat ttatgcatgg gatacaacaa tacacctttt ttttcttcat atgaaccacc 360  
 ctcccactgc ccattaggtg ctagttagta ctatttaaaa tacagaaatc ctgttcatta 420  
 aaatatctta attaaaatag acatttcttc ccttagaaaa agaattaaaa ccttttaggg 480  
 cctagcttta aaagcaacat gctacagctg attnatTTTg gtagtggttt tatggatgtg 540  
 aaaatattac cactgaactg caggaactnt aattgg 576

<210> 8726

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8726

acttcacaca ttttgattta ttgaatacca ctgggataat acaaatttaa taattggaac 60  
 attatttcat aaccattttt taaaattaaa ttttatctca ttcagccatt cagccagttt 120  
 ttttttttta cattttatta atacaaagt gaaaaatggc ctgtgcttat actacaagga 180  
 tctcatatga atgcagtcct gattgttcca cacagcaaga aaattcactt tcacagtcaa 240  
 caagtcactt tactcagtag aacacaaagt aaatggttta taactccaat atttgcaagg 300  
 aaaatacagt acaaattact aaaaaatact aaaatataga attgngttca ggcatntcca 360  
 ctacatcaat cgcagcagta acctgaaatt tgaaacttti aataaaaagt tcttaaatat 420  
 aaattatatg gcaaagtcca gtacattgct tttttcagtc tctttttcag tgttttgcag 480  
 tagaacangg ttcctaccct tnaccttctt taggttttaa aaacccaaac cacaantctg 540  
 tggggagtcc ttnncnttat gng 563

<210> 8727

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8727

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aagtgggtcc tgggtcaggc cgccttcttc accaagacct tctgctcctt tcctcctccg 120  
cttctgtctg ctgcgtggt ggccgtccgt aacacatccc acctgctggc cattcacctg 180  
tggctgtgtg ccatcttcct gccgtctgac agcgggcagc tgtgcctggc cctccctcct 240  
gtacatgggg ctcccaggct gtctctgtgt ctgccccctc tgcagggcgc tggcagctgt 300  
gtcctccggg cgcttcttct tcttctctt cctcttcccg tggggagccg cagtggcctc 360  
cctgatgtgc tgtgggaggc acgtctctga gccagcctc tgcggctctc ccacaaaggt 420  
cttttctctc ttctcagagg ggctccgggg gggctcactg cctctggcaa ctggtgtgga 480  
agggacacaa ggtcctcggt gacctgagga ncgccgtcna natggangan cacttccggg 540  
gtttgaacgt nccttggggc tttggggg 568

<210> 8728

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8728

cacattatat aaaaagtgtg catttaatct tcaaaatagt caaggctcta atcaggttag 60  
gttttccata gttttaagca ggactttgng gtttttagtga anaagtcatg gngcaattga 120  
aatcactgta agaaataagn gacttttaaa acaaacacag acacacacac tcctnttaag 180  
agtaatatat acncaacaca gcagctacat ggggtgttcag gcaaagggtg catgaacgan 240  
aagccctntg ctccctgccc gatgagaaag tcccanaaa ggattcagca gcagcaagtn 300  
tacagcacia acatggatgg cattgtccct gaaaacacac agttaggtgg acctacagga 360  
gacattggag cctagacatg tgggaaagg ctcagttcag tacattctac tgcatacact 420  
tgaaatatta cagtngttt tttctccaga ctattataaa taatttttcg ngctttctga 480  
aaaaaataaa actgaacttt tagtctgcga taaaggngac cctntttta agcaagntac 540  
tacatttgca ggatttgggg gga 563

<210> 8729

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8729

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cttttgatta ttgaagtgca tttaatatg tgagaggtct ttgaaaaccc catcttgagc 60
agcttgatta tatatcagat ttcagtctat cttgggtaag atcatttggt aacatttgta 120
tgtcaaatac atagtgaata tatctataga tctcctcagc cttctgatga gttacttggt 180
catacatgga gatttcttga agtgagctgt tagccatcct tttcacagat gaaaactggg 240
gacacatatt taatgcagtt atataactta tattgggaat acttaaataa aactggagtg 300
cctcactttt attactattc accactgttg gaacatgaat accaacattc tttctttgtt 360
ccactaaaga cagttccttt agcaaactcg cggtttcttc ttggcaggaa ctgaaaagaa 420
ttcggaattc agcgccaatt aaggtagtca gcaggctgtc atagctcttt gtctcctaaa 480
catccttgat gtgtctctcg ttttctctg tcttttccc aatcacacat attctttcaa 540
acttactctg cangtgccgg aactgntcaa tggan 575
```

<210> 8730

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8730

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gtgggcactg catcacttta tttcttttgt tttcaaactg tactctcgaa caaggcaa 60
tcagtctccc acctgcctgg ccgctttgtg atctctcact gaagatgggc ctccagctcc 120
gagaaggcgc tcagcagaaa ggtggaatcc ccaactgaca gccaggctgg ccgaggactg 180
cagggtccca gcagggtgat caagcaccca caagcagaga ctctgggcca taatctgcaa 240
acagagcctg catctcccag ccttgcccca cctgggtccca cactccttgc aggggacagg 300
ccagcccctc agtgatctcc agtgcctcaa gatctccggg gcctcagtgc catcctttag 360
aggccagctg tggttctttc tatacatccc tgctgtgtgt cctgctgacc tggcaccttc 420
```



tcccttgggg atgccaggca caagctgctg atcagctcta catttgattt tctttctttt 480  
 ttttttctta agagatgagg nctcactaca ttgcccaagg tggtctaac tcctaaccctc 540  
 aagtgatcct nctggcttgg nctnccaacg ctaggatac 579

<210> 8731

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8731

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 ttcaggtcag ccaaaaaacg tgaagggaag gtggacttta tacaacttag acatttatgt 180  
 agatagcaca gcagactcat gttcaagcca gccacctgaa acattataag tccgtcgagg 240  
 gggacagcaa tctatgggtc atggactgaa tccagcctac ttttgtatgg ctctgagcta 300  
 agaatcgttt taatatTTTT taaaggttgt taaaagcaaa taacaaagaa tacatgatga 360  
 ctctattctt gttctcatgt gtgaaccata tattatagcc tgcaaagtct aaaatactta 420  
 taaaccggcc ctttacagaa aaagtttgca gacccttctt ttacaccagt gctgtagata 480  
 attctggcag tacaactgca agtctaagat aatgntcatt cattcccatc ataaatgtaa 540  
 cattctaaat angngncttc tgatgtcatc tgnkanaatt 580

<210> 8732

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8732

gaaatacaaa ggacttttat tactgcacag tcattcttaca aattgttaaa gcaggatgtc 60  
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gtgttaccaa aaggcttatg agcctaaatc tatectcata ttaatgggca cacttttaggc 180  
actttttcca agaagtgcaa acctgttcct tggaaaagat aaccactaa tccattagtt 240  
ttttcgcttt gaaaaagcag agagctgatg gaaaggcctt aattggagaa agcaatccag 300  
ggctgctggg tggaggctgg agaatcccag gtggaaggct gggcatgagc catacactag 360  
gtgtctcaac tggtagggtc aatcaagtgg gagaacagac caaaaaaact tgaggacgcc 420  
ctaaagagat aatctgcctc ctattgcctt cagctgcctt tctgaggatg ttcttaaate 480  
acctatgtag gttagacca ggaaagctta aaggagacaa ctggaggaag anggtatcaa 540  
taatttanaa gtaggctggg catggtggct cacc 575

<210> 8733

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8733

aatcaaattg agtattaatc tttaatgcat ttttttttct catttgtaaa aagacatgaa 60  
tgaagttttg aggttcgtga gatttcattt tttcttgaat ggtcacttaa agtccaactt 120  
gacaatgaac tgctctgaaa acgtaatatg atatataatt gcagaagcag gtagagtata 180  
aagatgatga ctagatggtt tctgaagaaa tcaagagaat ggtaagaaag tgagagtgac 240  
agctttaagg agatatatac tacatgtgac taaaataagc ttaaatgata ctctctactc 300  
acagagtgcc ttttgaattt ttaccagaat tcattcatta attttaactt aataagacac 360  
agcaagagca gtattagggtc taaattacct ttaaaaattt ggctgcagac attaatgat 420  
tacaaaacac tatgatcatc ttctgaaggt attctacaca tcttaatatg gctactgaca 480  
tcctagcaaa tgncaaagtg cagataacna gctnacttaa aactaactnt nnaacng 537

<210> 8734

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8734

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actttcatta gtgctcattt attatttatg tagaaaagtt taaaatgctc ccaatgagtt 60
catcagttat caagctcaca tgagtttagc ccactctcct ttggtttttc atctcataat 120
aagtcagcaa aagttgacat ttatcttact agacatttcc cattagccct aactgaaaca 180
gatatcaaac accctagatt ctcttcagtg caaagtatct ggagtcacag caattttaga 240
gacaagctag tgcaatctag taattttcat agtcgcagaa aactgaggcc tanaagtgat 300
ttgtacatgt gagcagctag aaccaggaca agaactccag aacctgggac cacgtgagag 360
taaaaagaaa gggcaccgag tacaggaaca acaactgaca catttcaggt ggaaaaaaca 420
agtcacataa ctgaaaacca aaatcacagt tacataacta ttttatatta gcttcctaca 480
tataaagtat aaaaactcag ctatacatgg tatgaaattg tacaaactta cacttggtta 540
tgcctaaaat tgnataaggc ccncttatcn gn 572
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<210> 8735

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8735

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gtctctgggt agtcacgcta gggctggcag gggaggaggc agaggaaagg cagggagaag 60
agaaaacatc actgaaaaag aaggtgtcgg ggaggtacac cctgattctg accagcccag 120
cccacacaga gggctctgaaa ggttctcagc cttctccatc acccaccctg cggcctctga 180
aaagaggggc ccattctcaga cacaaaagca gatactccca accttatggg gaaagctaac 240
ggaggaatac tcacagcacc gtggcacggg acggcccttg gcttcagagc cgggctggca 300
ccgtttgtaa acattagacc tggatgatgtc tggggatgga ggaggagagg gatgcccagc 360
ctggaccatc aggtttgatg aaagagacag ggtggggccc ctcaaggcct gggaaatgtc 420
tattagctat gggaaagagg ctgacaggtt catggtgggg gttgcccagg aaggtgtgga 480
caaggtctga atctacctga ctatgtattt gcacgacttc agtgctacct ttggaagtgg 540
ccaggcttct gaggaactcc actggcctgg ggtaatgaac n 581
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<210> 8736

<211> 574

<212> DNA

<213> Homo sapiens

<400> 8736

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agttgataaa aactttatTT aaaacatgta aagaatcata tagttcaaaa ctgcaaaaat   60
aaaagacaat ttcttgtaac ttaaaaataa agtatatatc tagaaaccac cacattaaca  120
tctactatTT atagtacaat ctccaattca aagctaattct ttgtatttct gtatTTtgca  180
actTTtgagc tagaatcttc ctccctatcc aactatactg ttatgtaacc ccattgTTTT  240
aacatttaac aatacaactt gggTattctc tgacaagcaa gaatatatac tattgatcac  300
ttctatacac aaaataaaaa cagttcaaT gactagaaac taatTTtaca aaagaaaaaa  360
aaacaggTta gtaaaacatt tctTTtgaaa acaatgggtg aattagtatt ctgaattgag  420
ctagagcaca TTTTtgcttg aagactctcc atattaggca ctatgcattt atatagtcag  480
aacatttgca aaatgctTTT cccggttatt aggactcaca acacctgggc gctgggggaa  540
tagccggact acctcagntt acacagggag aacc                                574

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<210> 8737

<211> 573

<212> DNA

<213> Homo sapiens

<400> 8737

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gagacagggt ctcattctgt cgcccaggct ggagtgtggt ggcacaattct tggctcactg   60
cctggacTTT ccaggctcag gagattctcc cacctcagcc tcctgagtag ctggaactac  120
aggcatgtgc caccacacca ggctaattTT TTTttagag ctggggTTTt cccatgttgc  180
ccagattgga cttgaattcc tgggttcaag caatctgctg agccaaagtg ttgggattat  240
gggtgtgagc caccacaccc agcctTTTTT aatttataaa atagagacag ggtcctgctc  300

```

tgtaaccag gctggagtgc agtggcaca tcttggtca ctgcagcctc gacctcttgg 360  
gttcaagcaa tcttcccacc tcagcctccc aagtagctgg gactacaggg gtgtgccact 420  
atgcttggct aatTTTTTTT gncgttgggtg cttttttgt agagatgaag tctcggccag 480  
gctagtctaa gaactcccag gcacaagtga atgctcctgc ctangccttc taaatgttgg 540  
gaataatggc ntgagccant tgggccatct gct 573

<210> 8738

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8738

ggaaggccat atcctttatt aaaatcgcca caaatacaaa agcatcactg aactaaaaat 60  
acatcatata cgtatattct catattctta gaaacttate acaggtttat tggctttcca 120  
tcttatcaca tgtcataatc cgaaaacatt aaatagaaac aaaagtctcc atgcaatttt 180  
cagatgaaaa acattctgtg cattttcaac ttgtgtgttt tcgttttagat ggttgaaagg 240  
gtttgctaac aactgtttcc caatttaggc tttctggcca tgggagtgac atgtcctgtg 300  
tcatgtagaa ttgatagct tgtaatgtcc atttaaattt caagtgtatc ttgccttctc 360  
ttagcaaga gccagcctgc ggatattgga tataacaacca gctgcagctt cctggagatc 420  
ctggtcaggg gacccaacca tatccagtag aagctttact gccattctc atgcatgggn 480  
gatgcagtta tcggcgcttc tggaaagtgg tacaaggcct gactgtcgcc cgatgccent 540  
tggggcattg gattcagata ccnctagtg g 571

<210> 8739

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8739

actgaaagaa aaacaatttc ttttaatttg gtttgttggt cccacacccc atctatcaat 60  
 gtatgtgcta tttaaaaata agttctatac agtatitttg cagtaccttt gataattcct 120  
 agacctctat tttcattctg tgtattaatg tgaataacag atggatattt taatatTTaa 180  
 ggagatgggt aaactttcct ataggtcttg tgagacttcg tcttataggc tgaacaccat 240  
 tcacaaaatg taataatgct tcattccttc aggttgaggt aaagaacttg agcaactgga 300  
 ttagcaaagc tgcaaagaat gaaatgtggc ctaagatgta attatgttct ctgcccttcc 360  
 tttgggccag ggtagttttg cacttgacac aatggaaaat aggccataaa gcctgaaaat 420  
 aaaaatgttct aaaccccaat ctcacagcac tttagtaggc ttttactag gcacttttaa 480  
 agtatTTTca acaaaatact aattaagcta ccacttcaaa agagcttcaa ggaaaagctc 540  
 tgctttctta taaaatcttt tgagacagag tttccn 576

<210> 8740

<211> 378

<212> DNA

<213> Homo sapiens

<400> 8740

ggtacacggt acctcattta ttctcacaac atgcctgtga ggtagggagg ggcagggact 60  
 gtccccgttt tacagaggag gaagttgagg cacacagagg tcaagtgact tgcccaaggt 120  
 cacagacggc ggccaagctg gaaatgggcc ccggagcaga cccttggttc acctggggac 180  
 gggggggggg tccccctgc agcaagcgcc agccaagagg atgtctcgga tgccanagag 240  
 gcgcatacac agnatanagc atcccccat gtactgagct ggcttcgggg ctgacccttg 300  
 ccctccccta ccccgncctg caggcccggg ccattgcagt tcanggctcg tgacaccctg 360  
 ngagtngat gcngnggc 378

<210> 8741

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8741

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gcaaaacaat cagaaaacat ttattatact gaaatgtgta catcctacta ttaaaaaaac 60
aaagtagcaa atttgctggt gccaaaattt atttagcctg tttcactggg acaaactcac 120
gttcaatgcc actcagtata atttcaagtc tgataagcat ctaagtattt ttactccgct 180
tctaaaacct gatgaggaat tcaaaataag cacacggcat taaatgacat ttattgttcc 240
ataaatcttg agacccaaaa aggaatgcta aatagacaag caaaactttt aaaacaaacg 300
agataaactc acttctttcc ccagtgactg gtacagaaaa catgtggtca cacgaaagca 360
aagggaaaaa gtcagaaagg aaaactctct gcctatagga tctataggag ttacagatat 420
tttcaaatcg atgatgaaaa tagatcgtgc ttctttgtag caaataatta acccccttta 480
tgaataaaac ataaaatgtc aaagctttta ctactggaa gtaagtttgn cttctnggga 540
gagattcaaa actcaaaatt actcatttnc tatttttggc cg 582

```

<210> 8742

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8742

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gaaagggaaa aaaaatttat taggtccagg aatcaaagat gacttgatag aattatgaat 60
acatgcagaa ttggatgggt agaaatgaaa tcaatctatt taggtccagc ctaaggttct 120
gatagccaat cagtagacac aatcagagta gtagtattcc taagaaacca ggataaatct 180
ccaatgtgca tgagtttaat gaaccagata gattattgta tcgccaatat ccacccttat 240
cccattctca gtcagatgaa ttttcttgct catgaggtcc acattgaaaa cagcatgctc 300
agaaatgggg gtcttctcgg tgtactcctt tcccaggaca gggactcgtc gaggccccaa 360
cagtggatca tcaaattctca tcagtttcac tttggaaagg tctttaattc ctcgattcat 420
tttcattaaa cgcctgatta tggaatcaca gttatctcct tgcctgattt caattttggt 480
tgagaagtgg ccattgggat ggctggggat tccngagaa accgncacac caggtctatt 540
cttaaaacct taagnggggt ncaggacagc ng 572

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<210> 8743

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8743

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gaattcaagg gtatacttta ttacatgat ataatggta atcatgtgtt tccataaaat   60
gcttctcttc cactgttctt tgaacaaaca ttaaattcat ttccctgac aggggtagac  120
aggtgtcata atccctatit ccaacaggga atacagaagc aagggagttt tcaacactgt  180
actaaaggag tgtgcacagg gcagaagcag ctggaactcg gtgatgcttc taactcctag  240
gccagcacat ctgcaccagg aaagaggagc aggagtcctt ctcgtctctt acttccaggt  300
cccggaggag ccacgtttta ctaaagccag tccctttgct gcactttttc accagcaact  360
tcagcaaate ggtctgaagg aaagtagcac ggatctcctc aaaaccgtga gccttttagtg  420
ttttatacaa tcctttcagg gccagggaca ggaccaagt tgcttctact gcctcgggac  480
aatggctgcc atgctgcttt tgcanaaagt gactggcgat aaaggcaant gctgggaaga  540
ctggcttaac tggggcccan agtcancaca c                               571

```

<210> 8744

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8744

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aaaaaaaaacc atgaatcatt tattctttgg ttgtctacac agacacttaa gtactgtatc   60
gctgttatgc agcggcctgt ggaggcccct gggggtggct gggcctgtgt cctgagccct  120
cagccagatc caggggggtgc ggtgtctggt catgtccact ccaagagcag tagcaccatg  180
tagaaggctg tgagcagggt cccctcggct gactggcaga tgtaggctca ctgctctgca  240
gccccgaggg gctggccagc tcagagtga gaagagttcc tctccatggg tctagtcacc  300

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catccgtctg acctggacgc tgtcatagct catccttggg cttcgattca ctgcctgaga 360  
 gagactcttg tgcaggttcg ggggggcccct gctgggcatc caggggctgc tcctgggaga 420  
 ggtccatctc ttctgggctg aagagcatct tcaccaggtc atctgcctgc accctgtccc 480  
 gctcgctgtg tgcaggggtcc anggtgaacc acagggcgat ggcacaacgc tgcccctggt 540  
 gacagcctta cttcatgngg gtttcagtg 569

<210> 8745

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8745

gagaggaatg aagcgactgc ctttattgca tagacctttt caattgcttt ttanattggg 60  
 gacggaggac gcgcatgaga cgaacagggg atatgaattt ccccgcccc acccgcgggg 120  
 agaggaacat tagtgcaa at cctagcgccg gccccgggga acctgcccct cctgggctga 180  
 ttggccagct aaatgggggc accggagtgg atggggcgag gctgcgggcc ctgaccggcc 240  
 gactactga ggcctacccc agccagtaca ttccagggtc tgtcattggg cgacgcgtaa 300  
 aatagactcc gccctcagcc atcctggccg ggtaggagca ggtggcaagc gtcaggactg 360  
 agccctgccc cgtaaggcg gccccagatc agacgccagg ccccgccctc attgatcagg 420  
 cactaccctc gggacgagcc catttctctt taaccgtgac gacgccacc ttcagcatca 480  
 cgtctggtcc catgaaacga gcgcaatcct ganacggggc canggccctt ggcaccacaa 540  
 ctttacagcc aggccacacc cct 563

<210> 8746

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8746

acacttacta agaaaaacaa aaatttactt caaattgtag tataggcttt tcaatcacaa 60  
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aaaatgatag cacatggtat ctgagctgct tacattacaa gaaaaaggaa atacagtagc 180  
tgaaatatgg cactcctggg aatcaacttc taaaccaa atagaatgcctt tgaaatgatt 240  
aaatttattt gtgtattagt aagaaagccc caccaccata aatagtacaa tatttaaaaa 300  
taaaaaaaaa tacatctatc taagatagat agtgtatttg tactgttaga cttctttaag 360  
tgcagaaggt gggttcaggtt ttgccttttt aattaaataa ctgaccatat gctttataaa 420  
gtttcactca atcacaaaag ccaattttaa tcaaggaata tgatatcaaa gttgcataat 480  
ttcatttggg actggcagca ggtaaagtc ttaagcttta acattaatgg tcattttagg 540  
caatggaata gttaaaaagt ctcaaattctc atatc 575

<210> 8747

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8747

aaaattgcaa tgaaaaaaat tttaaattcct taccaaaaca gagaaagaaa aaacaaaatg 60  
cttaccaagc ccacaatata gctttcaaga tatttagatt aaactctaac ctattgtatc 120  
ttaagcacat aataaggcac ataataagaa attaagtaaa tacacagtaa ttctgagtaa 180  
gtattagaga ttatagnggt acaaaaaacc cttgagatta atttttttct aaaagaagac 240  
cttaccacaaa ataactttta aaaaatctgt caaacatat gatagacctg aatattttcc 300  
ttaagactgt aaactttttt tctgaaaaca attataaaaa agtagtttat aagtaggatt 360  
atttttcttt aaaattttcc aagatcatat tacttgacaa ataagtgtca ttttgaaatt 420  
taaaacatga ttttttctta ataaaattat tagttattct gacatcttat taacagatct 480  
tagttgaatt ccacttaatt ccctggggaa gctgagacac tgnattttcc aatagtcctta 540  
aaaggtaaag acnggctttt ttaangg 567

<210> 8748

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8748

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gtgttccaat aaaattttat taacaaaata tgacagtggg ggggccacag tttgccaaac   60
tttgccttgg gttttgttct ctccacagac tgagatccag tgcccgtgga aaagatgtcc  120
ccagaatcaa aaaggtcagc ctcccctctg gaatgaccca gagactttgc aaaggggctt  180
ctgtccactc caggcacagg accaccttcc caaggtgcag cggcagctgc cagggcctcc  240
tcagtgtgtt cttctccact ggctgctctg agctgtggcc gatggccatt tggggaaatg  300
gcgccatcag cccactgtgc aatgggtcct ctggggacgc tcatgtcctc agtctcgctg  360
gactcctgag cagccagccg cctagctgca cgggtctgcg gtctacgctt ccctctcatc  420
ttgacacggc tcttgtttgc actgtgtaag gtgtctgcct gagctggaag atcaaaacta  480
caccggcctt cccactcccg ggaaggacag gcacactttt cagaccgtgg cttctctctg  540
gtcaagatga aggaaaagcc aattttggcn aaacaggctt tn                        582
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<210> 8749

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8749

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gagataggtt cttgctctat caccaggtt ggagtgcagc ggtacgatct ttgctcacca   60
ctacctccgc ctctgggtt caagcaattc tctgcctca gcctcccag tagctaggat  120
tacaggtgtg cgccaccatg cccggctagt ttttgcatth ttagtagaga cagggtttca  180
ccaggttggc caggctggtc ttgaactcct gacctcaagt gatctgcctg cctgggcttc  240
ccaaagtgtt gggattacag gcctgagcca ccaagcctgg ccaccttttg gcttttttga  300
cagaactctt tcaattgtaa gtcagaaaac caacacaaac aggcttaatc aaaataacaa  360
caggaatctg tctcacataa ttgagacatc taaacagtgt tactagatct ttgattctct  420
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tggctgnttc ctttgggtgct tcattcttgc tggctttctc taagtagtag gaaaagatgg 480  
 caccgggaag tcccatgatt atgtgaccct tacagnttca gatcaaaaca gaaagccttt 540  
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<210> 8750

<211> 492

<212> DNA

<213> Homo sapiens

<400> 8750

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 gcaacctccg cctcctgggt tcaaccaatt ctctgcccc agcctcctga gtagctggga 120  
 ttacaggcat gtgccaccac gccagctaa ttttgtatct ttagtagaga tggggtttct 180  
 ccatgtttgt caggctgggt ttttaactcct gacctcaggt gatccgcctg ccttggcctc 240  
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 tctaaaaaaaa ccgaaacact ggaaacatgg atgcatctta aagactttat gctaagtga 360  
 accagtcaca aaaggacaaa tactgaatga ttccacttac atgagaaata tgagtagnga 420  
 agttgatgat ngagacaaaa ngnttggctg ttgctagggg aagggnaggt ggggagttat 480  
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<210> 8751

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8751

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 ccacagggcg tgagtgtggg ccttgcaggg cccagccgat gggtacaggc tgcaggcggg 180

actatggggc tcctcctgag gcctgggtgcc ttccagcccc ctgcccacca gcttgggtac 240  
 agctgcctgc ctgccagagg ccaagcattc ccaagcgtgg gctgggggag gccctgcccc 300  
 tctgtagcag cagagcagac agggcagtgg gagaaccatg tgggtaggag ggcatcaggt 360  
 ctcaagagcc tctcccctgc tcaggactgg gtctagacaa ggccacgtgt gatagggtgg 420  
 taagccctgg gccatatgga ggagcctggg gcccatcttg ggtcttgctt gctganttgc 480  
 tgggtggctt taggcaantc cnttttgtcc ttgggcactc tggttcctgn ttagcacttg 540  
 cancaaggct caaaatgtgc cctnt 565

<210> 8752

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8752

gtttgaaaag tatataacag atttctttat tattatttac aatcaagttc tgttggccaa 60  
 cataatgaaa taaataaaaag atgtgccctg gcctgtgaat ttcaactctc cttgacttaa 120  
 gttctctgaa gggcaaattg gaaagcgggtg atcaggcagg gaagagaggg caggtggagg 180  
 ccaggaccat cgggtgggaag gccacctgac tcctctctca ccagctctaa cactcacatc 240  
 cccaaatgtc cagagaacaa gcatggaaga aaaaaataa agtgcaaatt taaaagtgat 300  
 aaaaagggtg tttcgcacac ccaatgaact aaaactttat acgtaggtaa aatagtaaag 360  
 ataaatgttt ttccttggcc ttcatacaca cccctgaaac ggaaagatgg cgctgctgtg 420  
 cttctgagcc taggcttctt gactaaagc accaagggca tcgcacacag gcttggcaga 480  
 agggccatgg ncagaatcac caccttcaga caagattggtt gaggctcgaa tccttggcac 540  
 ccccaacttc agtngcncac ac 562

<210> 8753

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8753

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ccaggtgtgg atttttatTT tcacaaaaag acaacaatgt cttccccaca tacaagtatt 60
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ttgggaacat ggaaacatta ataccacac aattcccaga gatggaattt atccatcaaa 180
caaacagngc anattaccta aaagtgcact tacctgcaca actcgggtcta agaaccttgt 240
gaaacaaacc tcatggccaa ggtttcatga atctatTTtg tttcatacca tgcaaacctg 300
aacaagtgtg ctgctacact aaactgaaaa tcggtttctca ttttacaatt aaaaagggtc 360
tcaacacttt agcaactata cagaatatga aggtttatTT caaaaaagat tacatTTTT 420
taaaccagga tacacagatg cacttaatgt aacagtacct tctgcaaaaa tagggtacat 480
aatactcaga aatgcatgga ccaatcttat tctctaaaaa ttgaccgctt aanacttctt 540
aagngtanac agccttcaaa 560
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<210> 8754

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8754

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gcagaaggTT aggtgtttat ttgcactgct tttataccgt ctaccaggTT aaaaaaaaaa 60
aacagagact cttttgaagg catagatTTT agatatcaac ctgagactgt ggcatttggg 120
atttccagag catgtcgttg aggcactTTT gtaccagag gcacatggaa tttaccaggc 180
tgtggagatg atgtgctctc gggatgctgc tgccagtagc ctggtgaggt agggaagaca 240
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gcaggtggca cctgttcctt cctgccaccc acctataat tgcttcctc ttgagcacct 360
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ctttggtata aggagccatt ccctgcccان ggcangcagc cagtaccac cggggnttgg 480
gaacattgnn ggggctccat tggcccatgc ttntcctgct tntattagta gggaatcgan 540
gg 542
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<210> 8755

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8755

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agaggtgtca tgtttacttt ttatttagga gtacaaactg agacaaaatc atccttccag   60
ttagtgaggt tttagaggat catactaaag agaagacagg aaaacaccag taatggtgaa  120
ggtcttgaga aaaggacagg acccgagat agcgagagat cagaggaggc cctaatttct  180
ttcctcattt cctttccaaa tatcccaaat gtgcaatgca tcacctgaga cagaaggcag  240
aaagcatcaa gctctctgtt tatcccaatt caatgacaac cagaacttat tttttttgag  300
atgggggtctc gttctgtcgc ccaggctgga gtgcagtggg gcattcatgg ctcatcgcag  360
cctccaactc tcagtctcaa gcaaccctcc tacgtcagtg tcctgagtag ctggaactac  420
aggcatgcac caccacactt ggctcatttt taaaaaattt cttgtagaga caggatcttg  480
ctacattgcc caggcttgag tgccgtggtg cattcacagc tcaccgaagc tcaaactctt  540
gggctcaagc gaaccttctg cttaagc                                     567
    
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<210> 8756

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8756

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caatgctgaa aggaactttt aatatcttaa cttgacccaa attatattat tatttataaa   60
agttatataa atgcaggctg attgttttaa aagagtcaaa aagccaaata taagtaaagc  120
actagaaata aattcagttg taaaaaattg acatcattat tctaaatgtt atgtggaatc  180
acaggaagaa acatcattgc aatcattatt caaagtaata tttaaagataa cataagagat  240
gtttggtctt aaatgtcaat ttgaatgtat agtgtctaca ataatagatc aaagagaaag  300
    
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taagtatatc tgtaataaaa acaagaaaaa atgagttgca aatactgtat tctacaatga 360  
aagaagaatg cagattaagg ataaaacagt cttaccaact aggccccctt aaggatcatt 420  
tttcagggtg gctaaaagga gtaacaataa agctctacac atataactaa aatgttgcaa 480  
ttaatctagt ccagcacttt nattnganag ttctcaaate anagtncaaa tatnt 535

<210> 8757

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8757

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tctaggaggg ggagtgtggt agggggacga gggacaagat gatgaacggc cgtgggcatc 120  
ccgtaggggg gcccggcccc acccccgccc aaccaccccc ctcggaacg ctgcatcagc 180  
ttcaccatga ttcccagtggt tgctgggctg gcagggcgag atggctggaa acacagaggg 240  
acagaggggac agacagcgcc tccacaaaca aaccctggcc tgccccggcc cctacgtcac 300  
acgctgggcc ctgacctgag gcgggcctcc caccgccccg gcctgatctg tccagggaaa 360  
gggcgacagg gaggggaggg gagggggccg ngacgcaggg gtagtggtcg ccaggacccg 420  
gancaggtga ggaccatctc gactaatcct ttttcttgct ctctgctgct tttgnagggg 480  
cttcctgggc ttctgtgcaa actggncct tgggtgggct tngtgggcag gnacctggag 540  
gcctcctcct tgggtggcngg gg 562

<210> 8758

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8758

aaataaacca aatgcttggt ggagaagttg agcaggggag atgggcagta gaggttgcca 60



agacagggca gggggtctgg atgaggctgt ccgatgcctg ccagccacag tgatggtgca 120  
 tggaggggaag gaggagcaga gagagaagat aggcgtggcc tccgggatgc ccattctttt 180  
 tgacagagagc agcggcagtg ggtccagggg tcctggaggg gctggaaggg ggcagctggc 240  
 tggacatcca gaagcttttt cttccctcgg ccacgcctgc ctggcggcct ccagtcctta 300  
 gcctccgctc cctctctctc tccagatgcc cgccccactc cgtgtccata gcagtgcacac 360  
 agccacttcc ccagctccgt gtaattccca agggagcagt gaaccccacc atctcaaagc 420  
 tgaagagctg ctggccacac acatcctcta cggtttctcc ttcttctgaa cgccggcttt 480  
 gctggccctg gaatcttggg aaataaactc aggangngaa aagttgactt ggttcttggg 540  
 ggttttgttt ctggcaggca gg 562

<210> 8759

<211> 636

<212> DNA

<213> Homo sapiens

<400> 8759

ttgagatgca tgctttgcat acttctgcct gctggggagc ctggggactt tccacacctg 60  
 gttgctgact aattgagatg catgctttgc atacttctgc ctgctgggga gcctggggac 120  
 tttccacacc ctaactgaca cacattccac agccaagctt gcaggtggca cttttcgggg 180  
 aaatgtgcgc ggaacccta tttgtttatt tttctaaata cattcaaata tgtatccgct 240  
 catgagacaa taaccctgat aaatgcttca ataatttga aaaaggaaga gtatgagtat 300  
 tcaacatttc cgtgtcgccc ttattccctt ttttgcggca ttttgccttc ctgtttttgc 360  
 tcaccacgaa acgctgggtga aagtaaaaga tgctgaagat cagttgggtg cacgagtggg 420  
 ttacatcgaa ctggatctca acagcggtaa gatccttgag agttttcgcc ccgaagaacg 480  
 ttttccaatg atgagcactt ttaaaggctt gctatgtggc gcggtatata cctattgacg 540  
 ccgggcaaga gcactcggcg ccgatacact attttaaaat gactgggtga gtctaccagc 600  
 cagaaaacat ntacggtggn atgacgtaga naattt 636

<210> 8760

<211> 610

<212> DNA

<213> Homo sapiens

<400> 8760

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gagacagagt ctcactctnt caccaaggct ggagtgcagt ggtgtgatct cagctcgctg   60
aaacctccac ctctgggct caagtgattc tctgcctca gcctccaag tagctgggat   120
tacaggcagg tgccaccatg cctggctaata ttttgtttta gtagagatgg ggtttcacca   180
tgttgccag ggtggtctca aactccagt atccaccac ctcagcctcc caaagtgctg   240
agattacagg catgagccac cagcctggc cccaaactga ctcttgacca aagaatctga   300
tttggcaaac caaatcttag tgcagtgttc gctcctcgtc cccttaccca gaacatgatt   360
cagatcctaa cataaacaca aaaacaggctc agggaaacaa aacactgtgg tcttgctatt   420
atacaaaata ttgagataat gttcagatt cattctgntt tcagcaattg ngacaatttt   480
gaacttctct cgaacttcca aacacttcat ttcctactaa atcccaaacg tgtaaacang   540
cttcaccagt gggacttggg ttgggttggg ttttttgana aggaatctcg ctntgtaccc   600
agcttgaggg                                     610

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<210> 8761

<211> 457

<212> DNA

<213> Homo sapiens

<400> 8761

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gngggctttt ctaattaacc agggatcatt ttcacatcc tcattagact catctaaaaa   60
tggttgaaa tcgncatcat ctccagaact catgttttta gagctctcat agtcactttc   120
ttcattatca gaggcacag attcacttcc actgtcgtca gaactgntac cagtaaggcc   180
acctactttt cgtgcttttt tggttctcg agttatttct tcacctttcc gcttctttat   240
tttattttct ttacaaggac tatctcttgg cgaactgttg ttacttgag ctgtcaaata   300
gattcctagt aaactataaa gttttttcct gtctggagca ggaaaatgtt tttcaatgag   360

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tgactgcaac acacctttgg cagttgaaac aaaatcattc aattctcccc cgccctcttc 420  
caaagcttct aangntctag ctnttccngn anactgn 457

<210> 8762

<211> 612

<212> DNA

<213> Homo sapiens

<400> 8762

atctttggaa aatttaattt ggaccatatt ttcttctctt ttctgaaaac atcaaatatc 60  
cccatcacagt ttgggttcca cagcttacaagg ggggcagtg gggttcccg agttacatac 120  
tgtaccaaac ttcttataga aagataaaac attttccaac ctgtcttttg agtatttcct 180  
aaaaaatgct ttaaagtttc cttacaataa atggcaagta aaacaaagta aggctttttt 240  
tttctccttt tccccttttt atgtactgca tggtcgagga ataaggaagg aagactagtt 300  
ccatcacagt actagtaatc ctagtaccct ggggattact gctggatcct ccaggtata 360  
cccctattat tgaggccctg atgcaccct gcactgagga acctgagaag ggtaagtact 420  
aaacagtctg tcatagccac gtgggactgt cacagcacan gtgggactgg gagtcgccag 480  
ttcttctcgn gctcacagga gtaacaaagg aactaggact aaaccttacc agaggcttcc 540  
acgtggacta cagtccacac gttantttgn gggccttaca atgccctttt tgaccaaatg 600  
attactggaa aa 612

<210> 8763

<211> 612

<212> DNA

<213> Homo sapiens

<400> 8763

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aaacatcttt cagtctggat aaatacacia caaaggatca tagctgaaat accagtgacc 120

atcacaatag gaaaggtggt cagcttgtgg aattttcctt ttggtaacct taagaagtca 180  
 ttttagcagt actaaccata cagtatatgt caggcactgt aataaactct ttacaagtgg 240  
 tacttcattt agtcttcacg acactgaggt agatactatt aaatgtcccc atttttacaag 300  
 taaaaaaatt gaggttagag aggccacaga aggtacctga ggtttgggaa gtgtagaacc 360  
 aggatttaaa tctggaactc ctaggcaaaa aaaagtgttt taacaatcac aatatacagc 420  
 tttacattag taaaattttg aatttggttt tgntcattgg tcactatgca tgttttaaaa 480  
 tgtgagggtt atagcttatac tggtaggaca aactctttta cttctaattg atggctancc 540  
 aacatatctt caaaaatact attataatat ncctaatttc aacaccaaac acctntccaa 600  
 aaaactaatt ct 612

<210> 8764

<211> 616

<212> DNA

<213> Homo sapiens

<400> 8764

cagaccagct agatattttt attaatagata tataacctct ttaaaacatg tatattttacc 60  
 aaaagcattc tgatatggcg ttcctctagt gtgacttttt gcatgtaaat taatacagcc 120  
 tttttgacct tccatacagt caggttcctc ttcagtgtgg atgtttccta acgaccaagt 180  
 tcaagggtt tccaacatct ctttcactca tgggacttct caatgtgtgc tttgacatgt 240  
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 ttcacacttg tgagatcaca gctgaatatt aaggtataag gcagagcgaa aggtttcaac 360  
 acattcctta cagccagagg acgtgcattt atatccaatg tgctcacaag cttagtaagg 420  
 cccgaggaaa ataatagaaag cttttccacc ttcctcacat tcatagcatt tctctccagc 480  
 atgagttcaa acagactcag taagatgtaa gcatcgacag gtttctaccg tcaagttggt 540  
 tcctaggatg cncagacnca tgaatagtan ggctatggaa ggagcccaga tttncacatc 600  
 ctaaatacaag gctcct 616

<210> 8765

<211> 589

<212> DNA

<213> Homo sapiens

<400> 8765

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acagcataac agggtttgtt tactgtgcc catcatgggt gtttttaaaa cgaaatataa 60
atatatgggt agggatagca ttttaggag aacaagtgc caaaaactaa gttacctctt 120
ttcaggtcag ccaaaaaacg tgaaggaaa gtggacttta tacaacttag acatttatgt 180
agatagcaca gcagactcat gttcaagcca gccacctgaa acattataag tccgtcgagg 240
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anaatcgttt taatatTTTT taaaggttgt taaaagcaaa taacaaagaa tacatgatga 360
ctctattctt ggtctcatgt gtgaaccata tattatagcc tgcaaagtct aaaatattta 420
taaaccggcc ctttacagaa aaagtttgca gacccttctt ttacaccagt gctgtagata 480
attctggcag acaactgnaa gctaagataa tggtcattca ttncatcat aatgtacatc 540
tnaanagggg cttctgangc actgncnaat tcttttaact tttcttcat 589
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<210> 8766

<211> 614

<212> DNA

<213> Homo sapiens

<400> 8766

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atatcttata ggatttatca caaaatggtt ctgcccagtg catttttgca aacaataaca 60
attcactgag agtaataaca ttcacatatg taattagagt ttaaaaatgt aaaaaactta 120
gggtaacaaa cactttaaac ttatTTTTta gacattcaat aagcccatc tcccacaaac 180
tgtttgatta caaagaagca caatgggtta actgtggcaa aacataagaa ataaggcagg 240
ggaggcagat acagacttga gaacataagg ataccacaa aattttgtca atatcaaaag 300
acaaaatcaa aacatctttt ataataaaa acaaatccat ataattaaat actaattagg 360
tgaaagatta tagggatat aacatttatt ttctctacat aaatttgcac atcttaaatt 420
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taatgcaaaa catcatgttt caacttcaac ttaacatcat aacatgtagt tcttggtgag 480  
 tctagatgta atggaatgaa tatttaaata gacttcaaag atcctgtcag gttttaattg 540  
 gtattggtgc ttaagnctta atgctttctt tattatggac taagccantt tagaaccaaa 600  
 tcncaccacn ccct 614

<210> 8767

<211> 611

<212> DNA

<213> Homo sapiens

<400> 8767

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 atagtataaa ccttaacaaa ccctctctaa accagggtcat attcacatct ccccccaagt 180  
 tttgtcagtg agaataaaat atactgaact agtgagctca gtctttcttt aaaataggct 240  
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 agtgctaagt caagccatta ttcagaggcc tttttgtttt tctgctgggt tcgggggtgag 420  
 ttctttaaca agcttcttat cctgagggtca ttccagtaga ttctgccata ttctcaaatt 480  
 caaatggcgt gattccagtt gcaaatttgc tcatgtcang tatagggcta tgaattttan 540  
 tgggnccgtg aaggctggtg ctgcagaaaa gactttgggt gcccatgntg atgccangtt 600  
 gggncactg c 611

<210> 8768

<211> 613

<212> DNA

<213> Homo sapiens

<400> 8768

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 tctcaatgta aaggatcaga gatgccacat gttctccttg atgggagaga cccttccaca 180  
 tgggaatgat gggaaggagt tgtactcctg gatgttcagt aactgcttct aggagaaaag 240  
 gtagagtcct atcactaagc cgcagatatt tatttgtgtg tggctagaat gggatgtttt 300  
 gaatcttctg ttacaacctt gggaacgtgg ctgttatttc aatttatgag ccagaaattt 360  
 tcacatcccg aaactgcccga gagttccacc agcctgggta tagtatttgt tataatctag 420  
 tcgtaacagt agttgagcca aatctgagtt gatctgatga ttccgaacac tggagagaaat 480  
 cttgaacagg agtgaagact ggcggtctaaa gcccttcacg agaatgctca ctgggccggn 540  
 tncacgctca tccagtggcc taggtctgac tgccagcgaa caaaactgtg cngagactag 600  
 gattcattcn gcg 613

<210> 8769

<211> 618

<212> DNA

<213> Homo sapiens

<400> 8769

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 tcactacaaa aagaacccat cactgatgta agacctactc atgatactga agtagatttt 180  
 tttaaattaaa aaataaaagt agtcatttaa aatggaggaa ttgtagatga gtatggaaaa 240  
 atccattcac aaagttcact atttgcatth tctaaaagaa ttttatgtaa taaaatagaa 300  
 aactaatgat ttatagagat gtgcataaac tcaagagagg aatatggaag ggaaaactgt 360  
 gttatatcc catttaaat taaaaaaaaa agataaaac acttgaaatc tgtgtttcac 420  
 atattagaaa aaaataaatt caaatgattc taattccatt agcttgtaa tgtctccatc 480  
 tctaagatgc tgccaagata gcacacaact ttctcttgaa tatgcaccta acttcagggt 540  
 aaaaagaccc cagtcctcac tcgggaccga acacgttncc agagaaatca gaaggaatta 600  
 tgnaaancnt ancccntc 618

<210> 8770

<211> 614

<212> DNA

<213> Homo sapiens

<400> 8770

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gtcatgaaaa aatttgatgt tgtttattgc aaatacaatt taaacaagtt ttttttagtg   60
tttgtacaca atttgtcaat ttttcaatat tcaattttct gtacaggtac ttttgggaca  120
attcttatag ttacataatg tgaattcatc aaaatgcagt taagaaactt acaggaatat  180
atacacttga acccaagacc caaacctgac attatataca acctatttac aaatacatat  240
ggacagacaa tatatgtaca tagattatca taaatattga aaaatagggt agctttaatg  300
gattaatggt gttctataaa taacattaca gttgtaactg aaacatccac ggaagacagt  360
aatgcaaaat gaggtgacaa gacagtgggt ttaatactga agactgctca ttaatgggaa  420
ttcattgttc aggaacctca aggtagacaa gatagctccc agaaaatcat ccattggaat  480
ttccctagg cacttgattt tgaaccttaa atagccngag gattggagga gcttcctcac  540
ttaattgctg tagagaaaag aaatTTTTTT ccattcttct tgggtggcaca gtatntntnt  600
ccatcaaaaa aaaa                                         614

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<210> 8771

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8771

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ctctaacttg tagtccaata ggacactcaa agacatgatg ctacaatcaa acttgccact  180
tttgcagcc caatttggat gtacaatgat ggccggttca tcaggcaaaa tatacttct  240

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ttctcgacgc tggcgttcta tttcctcttg acgtttcctt tcttcttccct ctttatcgtc 300  
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 tggctttgga caagtttaga ccaatgggta ggtgtagaaa ttcttttagct tcaccatcat 540  
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<210> 8772

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8772

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 nacttttctc ttcccttggc ctttctctc ctcgccattg ggccaattcc ttcgatttct 180  
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 cctgctctag aaggccaggc cctcagattc cacatggttg gagttctggc caagtctgga 420  
 gctttcttca cacttngntt ttaaaactnt gggttcaaaa aaaactgnnc ntggtgagan 480  
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<210> 8773

<211> 589

<212> DNA

<213> Homo sapiens

<400> 8773

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 ttgatgctga ctttaagagaa atagaagcct ntatataagg caagagtcca taccagaaga 180  
 attcgaccaa tatgagatac ctccaaaaaa atcaactcaa taacctactt tatatgtaag 240  
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 gtacagtaac taaacgaact gtgtatttcc aaaggaatta agaccgcata tctggattca 360  
 cacctaaaag cacatagaaa attaaaccaa agaagggcaa gttttgacta aaatcacttg 420  
 ggcccangtt attctataag aagattctca ctggcatttg atagtaactt atcacctttt 480  
 gngcgagctt gggaccagct gctcaggaac tggttctgct tanngcgga tgcccaatgg 540  
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<210> 8774

<211> 613

<212> DNA

<213> Homo sapiens

<400> 8774

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 aatgctccca agtagaaatg acaggactca aaatcccttt ctaaagccca acagctaact 180  
 ttttctgact aatctctagc ttcatlgaaa ctggctacca agattgcatt tcaggctaac 240  
 aattggcttc ttagttaagg catcacaact gaaaatgggtt atttcaacaa tggatgctgt 300  
 ggatgaagga ataccaacaa acttctaaga actctcatca aaaactaaag caatttgctt 360  
 tgccccagtg gcaggcagaa ggaatttagc ccattatctc acaaactagg aaaggatttt 420  
 tgaattctga actagcagtc tgcacttgct acagtaacta tatgtataag ctggatcatt 480  
 ttgatattca gngacttttt gnagttttaga atatatatct gnagcatact ttaatcatcc 540  
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<210> 8775

<211> 444

<212> DNA

<213> Homo sapiens

<400> 8775

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ggggccactc aggaacaagg ggagacagat gccaggcatg tatgcaacag agaaaatcca 120
gctgcacaga aaccctgtgg gagagcagct cagtccagcc tgaaggcgtc tttgggaacc 180
ccacctagag gctgtaccct tttctcggcc tgtggccagt caccactta gaggcctactg 240
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ggggcagaca gaaagcccct aggggggcct caggggaccc ctggctctct cagggtccca 360
ttcaagtttc tgggctagtc ccagcactaa gctgggtgct ggccanggtg gataggancc 420
ccatcctnan ncctgngctg accn 444
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<210> 8776

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8776

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gcacataaag caaattcatg atgtgaaaga ggcaaagac aatagttaa gtatgtctta 180
ttttgtaata ggattttttt aataaaaaat tattgtggaa caaggtagat taaatttggc 240
ttgcaattag gaaatatggg agccggactt gaagagcgtg tgattgagtc cccacatcta 300
actgatgagg aaacaggctc agatgggtct attgatgggt ccacttgcta gaagcaaac 360
tggaactaga aaccacgccc tggcttctag gcagcaagca atagttttgc taattttgtt 420
ccccagcatc aaaacaaatg cncaaaatgg gaaaagacaa atgggtattt agttgggtat 480
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tttataaacc ccatatitaa aacttaaant aagtncatgt aaagaactgg ccccaaccga 540  
tgaaggg 547

<210> 8777

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8777

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cagaggagaa aacaacttcc agaagctgcc ccttcaaagg cctgaggtga ggacctgggg 180  
cagcaggcag cttggcatgc aggggttaac cagaaaggcc gggctctggag ggctgggcac 240  
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cacaggctca gatccctgga agtggcaggg agagaactga gagaaacttc accctctgct 420  
cggaggacat cccagccta ngtccttgct tctcaaactc taaagtgctt ataggaatca 480  
acttgggggt ctttgctnaa atgcagggtc tgagtcggga ngtatanggt ganggctaaa 540  
ctttgn 546

<210> 8778

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8778

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gctcaagagt taaagccagg aagtggggca gactggggag aggaggcttg tgttgctccc 120  
tctagtgttg gttcactgct gtgcagcaca cagcagtatc tgggtcaatg aggacatggt 180

cctagccttt ctttctccac caggaccctg acttatctgg ctggcccagc atggaggaga 240  
 aggaaagcgg gccgtgctgc cggggggatt cctggatccc tctgcatgct gacagacagc 300  
 tgtccacagt gggtagccaa ggtgactggc attttgatcc cagctgaatg aagactggat 360  
 ttgaatgcag tgccagggct gttctgtaga caagagcgaa cagtaccctg ttcgctccct 420  
 tctgcagtac cctgaggaag gagagaggca cccaaggcac gaatgcagac aacagangga 480  
 ctggncangc tatcccgttt tncanctgtt tgtgccacaa gccaccactc catactttat 540  
 gtc 543

<210> 8779

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8779

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 gagtaattaa gaccattcag ccaagattta catttgctgc cacctttaat agcactgatg 180  
 aaaagtagaa cttttttttt tgacttcttt ttcactgtgc ctctaataca gaaatttttg 240  
 ttaaaatatt aagggttttt aatgttttaa gaatgagaca taaaaaagtt gcagaaaata 300  
 aatgataaat tcttatttat tgaaagacat tcagttgagg aatagggata taactgtttg 360  
 ttaggtaagc ttatatggca catgattaag ttccactaat tcgtatttct gcattatgct 420  
 ttctgataat tccggagcat tatactcatg cagcagtggt aggaaagtac tgatgttttt 480  
 ttaaaaaatg gtccattctt ggccagccnc atgggttacg cctgtaattc cagcactttg 540  
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<210> 8780

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8780

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tggaagcga gggccaaagg gaggccagc agcacaacag ctcaccgnt ttcctacag 120
ccctaccgnt tntgtgcaaa ccaaggccaa cagctcctgc tgcctcttcc tccctggaaa 180
agtcactgtt acggggaggg ggccaggggt tgaaggatta gaaggagata gagggcttgg 240
tggggaggac acatgtaagt gctagaatca aacactgaag cgaaacaggc aactggcaca 300
agcagcaagc tgaggcatgg gacggggcan gaaaagggga gggaggggcc acgctgcccc 360
tctgggcttg ctcagctaag gctctgggggt cttgccctac gctggcaggg aaacaggccc 420
cagagcctca cccaataacc cgggagctag ggacatgggt ggcactggta aanaaagggt 480
ggaaggggaa aaaggantna aggcctant ggccctgtna cttaaagccc n 531
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<210> 8781

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8781

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gtcagtattg ctctttgaga aagtttattg gcaccaggaa ggggtgttggg agctggcaag 180
ctacaactgg tgagcaaccg ggcaggcaaa attattccta gagcttcagc aagttctctc 240
agcagttatg gacaaagctg gtcccagctt acagcacgca gtttcaccag ctggatgtgc 300
agagaattac attactagat taatgttatg tgcctgaggt gcttttatcc ctggcttctt 360
gacttttgat tgggtgtgat aagaatgact taatttggtg taatccactt tcacagcact 420
gacatactta agtatggact ganggttgct gaattaaccg gtgtgtaccc gancccaaga 480
aggcttaatg aantaggaat tactgnttaa gcctaagacc ttattataaa ttttgtcc 538
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<210> 8782

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8782

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aggtaagacc atgaaatttc ctaacgcttg attttaatac attgcgctaa ttttctaaaa 180
caactcagag gaacccatat ttacagtagg cagaatattt atgaaaaaaa tctggcatca 240
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tgtgtgtgta tcccagagatt atatgaacta agaaacaagt tgtgtatctt aacagcagta 360
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aggagaagac atcatctgat tttcaaaacc tggaagtttt tctcangact ggaagtcaaa 480
atcgnactgc ccntanggg aaaagggaac cttttccnta atggtcatct nc 532

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<210> 8783

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8783

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aataatatga atttaaaata gccacaaaca gggtagagtgc atgtaagcgg ctgaactgcc 60
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ggcttctatg tacagagaca agcagggtta ggcacttaaa gctttttgat gaaaatcctg 180
ggaaagagct gaggctacat ttattattat tactatcaaa acaacaacat acttttcatg 240
aagaaacatg caatcagaaa cattacagag actgaagaga gcttaagagt tttctgaaaa 300
tgaaatgaca tgtttttcca gagtatcatc tcaattataa aatttgatgg ttttatatta 360
tcatatttct tcagtggtaa atacctcatt aaaaaattat taaaaaatta ttgacaatac 420
aaagccctag ttagtataca aatattacta tactgggtccc atcttgtaag ggaaatatcc 480

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catctagata tctaaatatc ttctatcatc caatatctta aanccaattt cttaaattg 539

<210> 8784

<211> 479

<212> DNA

<213> Homo sapiens

<400> 8784

ctaaccagtg aggaaaatgc agaggggcag tgggttcattg agaaatgtta tcctttctac 60  
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aaaggataag catcagaaag gagcagtata gaaaagagat taaatatgca ctcttccata 180  
caaattaggc atttagtaca ggttctggca tatgggccag ttctaattcc tgatgaggca 240  
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ttgagacttc agctgttcta tttcttcttt cttttattgc caaatactga aaggagacta 360  
agcaaggaag ctggatatga aatgtctacc ttcttgactt acggttcattg ttgtggctct 420  
tcctatttcc accttaaaat tgacagggcc tngctnaaat ttngctncc aangatncc 479

<210> 8785

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8785

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tttcatgta ctaactcatg taattctttg ttttttagag atctgaagtg attttacctt 120  
tacttccttc actttaagcc aatcatgaaa ttccagtgat ttctgggggtg agggcgaaag 180  
gtggtgttac gaatcatcgg ggctgtggcc cagttgcctc acggaggtgc aggtaggctg 240  
gggcctcact agggcagctg gaggagcacg gactgccctg ccggcaggca ggtgatgttc 300  
cgagagcatg agagctggta tgcaatgtct tctgcagctt ccagcttgca cagctcgtc 360



tggccgtccc ctgcagtggc cagtgagttg gcgatcagct cagctgcctt ggagtcaccc 420  
 tcagcagaga tgatggccgc cttttccacc acaaactctg cgctctctgc ttcctggggg 480  
 gccacctgtc tggtaactnc tttcaagaan gncanattgt tcaaaaacac gttgtccana 540  
 atgagcccca aaggg 555

<210> 8786

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8786

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 aacatgttct tatatttaac atgtttgata ttttcttcta gaatatcata gcaaataaat 180  
 attcaacata caccaaaagt acttaaaaga agctcctttc ctttggacat caacttttaa 240  
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 ttggaattta ctaattactg gggatacttt agtgagtctg catatgtgta ttattaatac 360  
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 gactgtattc aaagtctgag ggaatgacaa aacgggatgc acatctaaca ctgatcccng 480  
 ttcttcagaa aagactagtt tcagctggtt ccaggnttac ataagatgat ggaagcngtc 540  
 ttt 543

<210> 8787

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8787

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 gtcanactga aatgccagng gagcttgga ttcagngctc aatcctgatt gatncctatc 180  
 ataagccaat ggcactccag gagtatttcc tcttgcaatc tcccatttct caaaagatga 240  
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 aacatattga tgatagtcca naggcaattc ctctctcact ctttcttctc tcataaaaga 360  
 tgcaggttgc tgatttttga tgtcatcctg gtcctgggat ttgggaggca aacactgata 420  
 gtctgccaga gaaaagcttc tctcccttcc tcatctgnca tatcagagta tggctcctta 480  
 aagnnactt tctganattt tggtagaaaa tcttgggcct gacatttggg an 532

<210> 8788

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8788

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 cccagctgta atgagttaca aggtgttatt atctcacaca cacacaggag gcttcactct 180  
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 atagcaagtt aatgaagga agfittgatg gggagggagg ggcaatatgg ttccccaccc 360  
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 gtcctcangt gctcagacca aggtggctct gcagcaccgt gcttcagaag ttgggaangg 480  
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<210> 8789

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8789

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cgcttcacct ggctgttact gctgaactcc ctacttntaa nagnacagaa nanaacatcg 180
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ggctcttggc cctgtcactg ngctgggtt atcctggggc cccaaaagcc ctttttttgg 480
gcagganctt cgncttccc ttttnataac ccccttggn cccaanaaaa ccccag 536
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<210> 8790

<211> 475

<212> DNA

<213> Homo sapiens

<400> 8790

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tattttttac atatttatag atacaacaaa gacaaataac ttagcaaaaa ttacaagttt 120
aaagaatagt actattttga aacagccaat atagtatctg aaaatattcc attttatcca 180
taatcagtga gtattatttc caaaaaagt aacttgcatt ttcttgtgaa aaatatggtt 240
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tgtaatgcct ttattgagaa ctttttttac ctaatggctt taaaaccac gtgttttcct 360
ttggacttag gtgaattcta aatctttact tcactttcaa actacagggc atngacntaa 420
acaaaaacaa atcanatnga gagttttggg ttgcttttct tnatactgng cgaan 475
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<210> 8791

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8791

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cacgctgaac tcacacgtgc ccggcaggaa ggagctctca cgaagtgcc a gctggatgtg  180
agcttgctct ggcagcagca gtgctgtcct tgtttctgag ctgccaccta ttcactggag  240
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ttnggtctg gtcagatfff agtctgcttc aaaatcaaaa ggtcactcag tcactctaata  360
atgatcattt tgaatatgga aatttggtat ttacatgctg tacctcaaat caaagaaaaa  420
gcacgcgtca atatcacgcg taggaaaaac tagaaaattg ttccttttcc atttgcccc  480
tggttangtt tcttcataac nggtcngctt ggaaaccaga ctcccccttt naacagatgc  540
cn                                                                    542
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<210> 8792

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8792

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ctcttcactg ggttggttct taaaaaaaat tcacgcaact gacaggagga attgtcttta  180
ttcttgcatc aatgataaat gtaatctaca agatggcctt catggattag aaaaaggaat  240
cagaccacia ggaaaaagaa attgctggtt ttcactcaag atttatctag aaaagtgtac  300
tgactactgg aataatagtt taccctggg ttgtaccaca gaatgagaaa ttctacaaga  360
ttatacaact ctttttctac aagattacac tactcatatt gnttttattc cattccggaa  420
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ttagaaatta acttttctaaa tatcgnntttt tttctccaaa aaaatccttt taccagctaa 480  
cctgggatat ggccaaaaat atcttgatnc tggnaaaggg ctatctccct agtaaaaaat 540  
ggaataaatt gn 552

<210> 8793

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8793

aaaaccagaa tgaaatttta ttgtgtaaag tttatagaag tatgactagt attcctttgt 60  
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gatacacgct gaaccattta cagacacact aaaaatgttt taaaatatct tctttctcca 180  
aagagtccat tgcgcatttc ttagagtaga gatggggaca cattccaggc aaggtcacaa 240  
tggcattttg ttgccctcaa tgctgatttt cactgcgtgt gcagatctgc tttttttcct 300  
tatatctgtg aacttttctca tctgtttatc cagtcgactg atacccttct tggaggctgc 360  
ctgaaacctg gatgactcca ttccacatt ccatttgggc ctgacaacat agtccttggt 420  
tgaaggcatt gggacccttg cacgggcaca gaatccaagg atctccangt cttaaaaacc 480  
ttcttccttt cttgtaacac cctttttcaa gggctnttct ggggggtctg accccccann 540  
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<210> 8794

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8794

gcaaaacaat cagaaaacat ttattatact gaaatgtgta catcctacta ttaaaaaaac 60  
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gttcaatgcc actcagtata atttcaagtc tgataagcat ctaagtattt ttaccccgc 180  
 tctaaaacct gatgaggaat tcaaaataag cacacagcat taaatgacat ttattgttcc 240  
 ataaatcttg agacccaaaa aggaatgcta aatagacaag caaaactttt aaaacaaacg 300  
 agataaactc acttctttcc ccagtgactg gtacagaaaa catgtggtca cacgaaagca 360  
 aagggaaaaa gtcagaaagg aaaactctct gcctatagga tctataggag ttacagatat 420  
 tttcaaatcg atgatgaaaa tagatcgtgc ttctttgtag caaataatta acccccttta 480  
 tgaataaaac ataaaatgtc aaaagctttt actcactgna gtagttggct ttttgggaga 540  
 agatttcaac tcc 553

<210> 8795

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8795

aattttgttc atttttatta acataggaca tactaaccaa atattatcat ttaataaaat 60  
 caacgttaca aagaaactca ctagcaaata aacaaacgat attcacttga ctcttctctt 120  
 ggttgaatga ttttctatta attagtagta cacagctatt tttatcaatt tatgcttaaa 180  
 ctgccttatg atttcaatga aatttcttag cttttacttg ttgaataatt ttttcaattg 240  
 ggaatctttt cataattcaa aatagttcct gaaaattaat gcaccttca atgtcttcta 300  
 cttagctgg gtgcatttaa aatgcaacac aattctttga aaggagacta tgacatttga 360  
 gcataaagcc tataagaaaa agaaatgtct tccctcccc catgcttcac agagactata 420  
 tgaatgttcc atactcttca tatttagcaa caggagtcc ttagagatca aacagcagaa 480  
 aacaggagga acttangcca tcaatggact tgtaaaacag ataaactcn aatgnatttt 540  
 aagattccat cttcttcaca gatgaa 566

<210> 8796

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8796

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ggggggtgca nagctgtgtc tggaaccacg gntagagcca cgggccgaac tgngcacaga   60
tgccttcctc ttcggntca tacttcgact ttggtcttct tcttcctcgt aacgactttc  120
tcggncgct tttcgggctt cttcctccag ttcacccaa tcctttccac tctcttcttc  180
actaccaat gactccttan aatagtctga ctcttctgct tctgatgaat aatcttcac  240
actggcctcc tcttctctt catagtcac ttctgaagga ttaaaagtct catcttcaat  300
ttcagactct gaatccccctt cttcagcatc actccccna ccctnaggct ccaggaaaga  360
ccagccacct tgntegaaga anccctnagg gtcacaaaca atggnccttca tgattttagt  420
ccagttgagg gactgnactc cttctgggna tttcaggtcg caggaattca accattcctt  480
gatggggcaa ganaagcttc nggaatggcg gttgacatgg cactttcttg ntggagnccc  540
tgggg                                           545

```

<210> 8797

<211> 481

<212> DNA

<213> Homo sapiens

<400> 8797

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cactacagac agaatatctt attttattgt gtcgcataat cctttcctaa aaaaaaaca   60
ctgcttctcc ccagttacaa gagactaaaa gcatactaaa aacactttat cgtcattact  120
aaatgcatta aatacacatc ctaaattgaa tatgctgtat atccgatgaa atacatagaa  180
cgttcatcaa ggcaaaagaa aagacgtagc caacaatgga aagatggcac acacaagaaa  240
aaaaaagaac agttctcaaa tattgcagta acttttcaat gtatcataga tattctatga  300
cttttctatg aaacagagga ggaccaaaca ttatacacag tttgaagaga ctaaattgcca  360
gagaatctac agatatttagc atccaggaat aatttttatt cctggcccat tttctgcccc  420
ctggaaaaaa ttgcattggt tttccttcn aagaggncnc ncaaaaaant tntttccatn  480
g                                           481

```

<210> 8798

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8798

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gaggttcana aatgcatata ttttttacit acaaatatc atctgaccaa aattcaacat   60
aacctttatg gaacacttaa caattgtttt gtttttaaaa taacatttca ttcaaactgt  120
atataattca gtaaagtttt ttatacagca agcaatgctt aaaccctgga aaatntgtan  180
aaaagagatt ttcacacaaa ataagaaaag aaaaatctga ggtatccctc acacacacac  240
atccattcat tctggcccat gtacgtgcac atacacacgc atgcctgtgt gttcacacag  300
acatattcat tctcactcac aaagnggctg cagcataggc aaaaattgta ggtccaaagg  360
aaaatgattg attgttctaa taaagagtcc gagtagctca gaaaaaaaaa ccaaaacaaa  420
acacaagagt cttctgagga aattactacc tcaaaaaaat gttctcaaga tgaatttgag  480
atctaagcct actaaactgc ttttgcaaaa cagcttcctg cagtccaagg ngacttgggc  540
aaatagaaag gaat                                         554
    
```

<210> 8799

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8799

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atgaacttct tttattcaaa tatattttca cacatcttat ctaaatacat aacacagaag   60
cctgtgtgac ttgggcaacg tgggtccagga gggcctgaga ctaacacatc cacctcggca  120
aaaggacatc aaatatctct tacagtcgga acaaacagcc ttttgtgtat ttccttagtt  180
tacgaaatat actcgaaatg ctattattag ctgaatttgt ggtttccttt tgagtttctg  240
agttattctt atttattttt cccattttgt ttttgacca aggagaccgg agtcaaataa  300
    
```



tactcagcga ctgatttcct ctctttggac tgaaaaatta aacagatact aaatgatgac 360  
 agtgaattta gagagggctc caagggcctg aaagaacatg tctgggataa tatggtgctt 420  
 ctaagagtat tgcaatcaca tcgtggcaat caccggcgcg tgccgcgtga ctacctcctc 480  
 ggctaatatg ctttcttctc ggcatgact aatcacgttc tattaaacag cagtaatgcg 540  
 ggaagaactc ggctgtncaa gtgtaaagg 569

<210> 8800

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8800

agcaaaacaa aactgtttta tttatcaaag acaatgaaaa aattagaaaa tacagaagag 60  
 gttataaagc ataataaatt ttatTTTTTg gaaatggaaa aatgtccctg aatagttaga 120  
 tgtacctttt agtagtaatg tctaataata aataagaaat caattttata aggtccatat 180  
 agctgtatta aataattttt aagtttaaaa gataaaatac catcatttta aatgttggtg 240  
 ttcaaaacca aagatataac cgaaaggaaa aacagatgag acataaaatg atttgcaaga 300  
 tgggaaatat agtagtttat gaatgtaaat taaattccag ttataatagt ggctacacac 360  
 tctcactaca cacacagacc ccacagtcct atatgccaca aacacatttc cataacttga 420  
 aaatgagtat ttgcataatc cagttcagga tatgtttttt acaagttaat cctaaagtct 480  
 taagccagga agcttttctt agtncaggat tttattggct aagctttaca aattaaccct 540  
 taaaaaattn ttccanggtc n 561

<210> 8801

<211> 376

<212> DNA

<213> Homo sapiens

<400> 8801

caataaatac atgctgattt attacaggga taagatgggt tcttggggga tagattcaag 60  
 aggagtgan aatgttttat tcatttaca tgncccttct ctggaagggt ggacagcaag 120  
 atttaggaca agctaaaatc atcccctatt taaaaaaaaa aaaaaaaaaa agtcaccagc 180  
 aagtantccc gggngggagg tgggagcana ataaaaaaaa atctgcantg attcctaatt 240  
 gtttttcaat acanaancct gggaagggt ttctgccagt tcatgagga aggcccaact 300  
 tccaggtagn gttggggang ggtatgaggn cctatgcagg ctggcctctt atcccacaga 360  
 tgccaanatg atgnnn 376

<210> 8802

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8802

catgtcatac taaatatitta tttctgcag actgacttct gagtaattct tgagccagga 60  
 ggggagagggt tagtggtcaa attgctgaga tcttaggtca aaaagctaca gaaaagaaat 120  
 cactttgaaa aacacaatga ctcanaggca gtcaccctt gccagcaatt ccaagagctg 180  
 aggaggcttc atgcctcagg acatggtgac tagttgagt aaccagagat tgaggcagt 240  
 gtttttacag gggaagaaac aagccttggg tgtatgggag caggaaagga gggtagacaga 300  
 ctggagaaat gataaaggcc attttgaag cccacaggga agtggctctg ggaaacctga 360  
 agacactggg atattcagaa ggccaagggg atccagctta tcctgttggg caaggtgctg 420  
 ggagtgaagg caggtaagcc atgtcaagg cctgggaagc aaggggaaaa ctggaagggg 480  
 taccacaggt gaagaagggt atggaatggg gtgcanaagt ccatggagat gaccggcaga 540  
 tctcaggccg gtttttggca catnaaa 567

<210> 8803

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8803

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attttccag aatgccttta ttttcagtat catagaattt aaatacagag tcaaaagatg   60
atttataaaa tataaaacat tttctgcttg gccgtatttg aagacaagct gaatacatat  120
ctatgttctg aataagtcca ctatggatat atataggaag agatatacat atatccatcc  180
acagatacac acacacatat atatttctgc atgtatatat acataattct ttctatagtt  240
acaggaaata cttcttctat aattctgatt ttgactccca tcctccacca tttactcatc  300
cactcattac ctaaactctg gctttcttct ctatattgta aataatccat ccaaacttct  360
agccagtact gtcaggaggg ttcttgctcg agtgagctgt taatactatt ttccactgac  420
aacttctgca catcgaggga cacagtgtat ctgaagactc cgctgnatac ttccacaacn  480
gggggcattt tcntttgtag tcggcatgga caatacttat aggaagaact nttacgaatt  540
cnccccttta agtggggg

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<210> 8804

<211> 503

<212> DNA

<213> Homo sapiens

<400> 8804

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gngtgtgtgt gtgttttgnt tttgntctgt ttttaataac aacagtagga cccaaactaa   60
aaagtcggtt catnttcaaa ccaacaagag cactagagga cttgngactc agtaccttca  120
tataacacca cataaataac tttagccaca gtcaatgttc acagcctggt cagtggaaaca  180
aaggaaatac ttttctggcg attagacgtc atntgcagag agagctggga tattcatccn  240
aggccgggtg aaaaatgcc a ttttctccct gaaagactga acttntgggg gttccttaca  300
gctntggcct nggagcctgt gcacatcctt ggcagctgcc ctcacatct tgnctgtctg  360
aagctcaccc ttgtgctccg ctcggnccat ccgcttctcc agcatnctna gcagcaggcg  420
gaaacgctcg tcctacgcaa ccaactgtggc aagcttcttn tcccngggt cttggcttgn  480
tccanctggt ncttgagctt ctt

```

<210> 8805

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8805

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ccttgcaact aatggaatgc tctacaaagt tgagggtcag agggggaaca attatataga 60
aatttcggag atgtatatc tttggccttc gaaattctgg agcaaaaacg tctacaagca 120
ttttgaaata ttctgtgcct tcggcagaat ttcgtgtgtg atcactgagg actgaatcca 180
aatgccttgc tgcttttaat gtttcttctg caagaccttc ttcttttact agttcttcaa 240
aatttacaat atcttcaaga tcaggaacaa atctaattggc attgctgcta caatgaagac 300
caccagatct tatcattcgt acatagccca tagcattacc aatctggctg atgagttgcc 360
tgaattgatc aaggtagctc tgtccctcag gtgttattcc aagttttctg atgcctcgat 420
tgaatttttc tgctctatca aaaggatact tatgatcatt tnggccttaa tttccctgaa 480
aaatcgaata tctttaatca atctggattt gatgggtcat catacataaa ttggctaaat 540
ntntagaact tctttttcaa aa 562
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<210> 8806

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8806

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ggggaagcac aagctttatt ggctgaaagt tcttctcagg agcctggtct gctgggactg 60
catgttcctg gatgggctcc cccaggccta agctccaggt ttcctctggc ctccgaagg 120
atthtngggg ttacnaccaa ctgatcaaag atgacttttt cctggcgctt gctcanctgc 180
aaaagcttca tggngttttg caacctcttt tcttgntcaa acaatttttt atgtagtttg 240
gngacctctg ccttcatttc tccaatctgc tcacagtga gggggcactg gccatcctcg 300
gggagtgaga ctntccanan aagcttcanc cncctgtagg cctnttcag ggtcancttg 360
```

gccgtgctca cactgctcac aaacttgctc agtgggtgctg ggtgtggacc ctttgttccc 420  
agctcttgac ttgtggagct gggagcctct tgggtttgaa tgccatttca gcaaggacct 480  
ttgccctggc tgaactgttt ancanggnct ataagcccna aan 523

<210> 8807

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8807

acaaaaagaa atctttattc ttcagcaggt agacaacatc tgccagccct ggtcctcagg 60  
gccacactca tatgcactca cccctcagca gcatatcgcc ctttttctga catataaatg 120  
caagagaccc aggaccctag atctttcttc aaacgcaagt gtctcacaca cacttatttt 180  
acaaatccac tagaaatatg gactcttatg ttctttgtac agccatgcaa cagaggccta 240  
gcatttgtgc tgtgtctgtg ggaaaggcag tcagagacca gtggtttccc tgctttgggg 300  
aagatggctc aacagttagt aatcccaggt tagattgtca gaacagtcta ggccaggact 360  
gagggtctcag ctgccagggc tccccaacag aaaccactcc cctctggctg acactgcttc 420  
cttgcgacc agtctcttct tgnatccag gggtttggct aaggcccgaa tcacctgtgg 480  
tttgtaengc agcagcacan ggggtgggcag gcgaatgana acatgcatgc actgcaatgc 540  
ngngaancc ggacaagcc 559

<210> 8808

<211> 401

<212> DNA

<213> Homo sapiens

<400> 8808

gtctttttaa aacatcgtaa cattaacaca tggccgttca ccgtcccca gcgatgggag 60  
ctggcctggg gccagggtc ctccaggatc ttactcatt cacagtaacg gttctgacca 120

gtcctccagg tgcacgtgg atgcgacagg ggtggggagg gaggaggaag tgactgtccc 180  
 acctntgcag gaccatggga gtgggcaagg tgttctccgg ggcgaccccc tgaacccagg 240  
 ggtgctgcag gacttgggcg gcactcagcc tctgcttggc gtcacggacc ancagcttgg 300  
 agatgaggtc tttggcancn caggagatgt gggcccagtc cttgnngggg aactcgnact 360  
 tgccctcctg gatgctctta aacagcatgt tctggcnngc a 401

<210> 8809

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8809

cccaaatacat tatattcttt tatttataga ctctgagagc aaggacccaa gcacagcctg 60  
 gtgctcttgg atagagaaga aagcagctat tgtccacact cagaggttgc tgagggtgccc 120  
 tccccactg atctggaatg atctacactg ctagtgaaga ggagggatgg caagctgact 180  
 aaataagaag gcaggggaaag aaagtccgct ttagttctga gggctgtgac attagatgag 240  
 agtggagccc tgggcatgtc agccagcctt ctgtgtaacg cccgcccagg tcccattgtg 300  
 tctgttctct cggctcctcca ctgttgccca catcttcctc caggctgctt aagtgccccct 360  
 cctggagtgc atgagtaggt cgcgttgagc cccagcctcc aggctggagg tcagtctggc 420  
 tgtgggaggg tcggtcggca gaggcaattt gttgaaaaca cctctgcca agtagtcagc 480  
 aatcacagaa aactgcattg gaggaccta gctgatgctg gaattgatca tggaactcg 540  
 ttctggttcc tggg 554

<210> 8810

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8810

gcagatcata gtgcttttatt aacaaattca tgtgttcttt tcccatccct ttaatacaaa 60  
 aaaattattc atcagtttatt ttcattctgac atttactaa gtacagaatg cataatgtca 120  
 acattattag atcagccatt caagtgggtc acataagttt atcctcattg tgccaaattc 180  
 ccactcaaag gataagctga ataacagatg cctccaggtg tatacaacaa ccttagtttc 240  
 ttgacttgaa ctagtcctgt ttaacaggtc aaactgctag tctttctaag taaactaaaa 300  
 aagactcaag tacacagctg tacatacata tcatcagatg gtaagttcat ttcaacaaga 360  
 acctctataa ctaactgtac atttgtacag ttttctgcta tcattgcaaa agccctctg 420  
 aacaaactta tagtttagaa tttaaaacaa tcctgatgag acaaaacgta ccaggtggct 480  
 tttctgnagc agaaattaat tccaccatct ttncttaagc caatttaaag ccaaccaagt 540  
 tggaaaataa atttgcagcn ttcngtaacc aaatgtctnt 580

<210> 8811

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8811

atataaaaat aagtgtttat taacaaatgg gctcagagta gaaaatgcag acagatgggt 60  
 tcactttacc atattttggg atcatcatct tattgcgtac agcactgtag gcaagtaaac 120  
 gaaaccaaag gctggctccc ctggccgagg cctgggactg atgcaagaca gccagccagt 180  
 cacctccgcc tcccatgaac ctcttgaaa acttctcctg tcccattct gtcaccctcc 240  
 agctccttga gagagccaga gttgagaaga aaatgagcct gaagttgaaa gggaaagttc 300  
 ttgcctgaaa cagtgtctggg aataagtcca gaccatttcc ctcaagagcc acctcttcac 360  
 tccttaagcc agaggacacc acaagacac agttaatggc ctctcatgcc actcctcagg 420  
 tggcttgtga gggcagccag tgagggactg caggatttca ngggaagtag ctcanatggn 480  
 ccactcagaa cttttggaag aatttgangg acaagggtccc gcagtcgcac ttttgagcat 540  
 nttggcattg tccaaataaa tggggtcaag ctttttcaat cng 583

<210> 8812

<211> 506

<212> DNA

<213> Homo sapiens

<400> 8812

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agaacaaaat ggttttaatc aattgcgtca ccctcactct cctgggagcg gagcaacaaa 60
aaggctcggc tcctggtgag tgggtgggttg atcgctgcat ccagtgtaaa gcttggggct 120
gctggggagg gaggggccga gtaagggaact ttcccatctg agtggctcag gagacccacc 180
cctctccctt cagagcagca ggggacagag aaaagccatc acttcttttg tctttgtggc 240
ggctcancat gtgggatggg aaggagggca gaaagggcag agaagggcc ttagcaggaa 300
gcgccacctc agcagagtag gcctggctgg gagctctggc agaaaggta cagtgaggct 360
gaggagcgcc caagaggaga atggccgtag tgcagaagtg ctggcatgga tgggtggggt 420
aaggtgcant gccccaccct ntgccanggc ccttgggaaa ggcaaaccct ccaaagtggc 480
catgaaaata ggtncagggn cnnact 506

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<210> 8813

<211> 473

<212> DNA

<213> Homo sapiens

<400> 8813

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actttgagta tcttgctttt gaagctgttt aatacaacaa tgatatcttc taggtctgct 60
tgagagtcag ttccttnatg cccaactatt tgataaatat cttcagattt tccttgggtg 120
aacctcagta tccaagcacc tgggtttgct ttttaattgaa aatacccatg atnggccatc 180
actattgtat caaccacagc aggtttatct tttgngccta gngtgaactg cagaccccga 240
ggaggctgtt ctgtcacttt atcaaagcat tgctcctcca gtagtaagta ttctagttca 300
tattctgctg taacagtttt ctgagtatcc ttttaagngaa tattatcaag gncacagttg 360
ctgtgcactg tttcaaccaa ccagccttct ggagtaatca tggtgaggat taggaggggt 420
gattcaggaa tatccaaaaa ttttgccnct ggnccaanan aanaaacgnn tta 473

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<210> 8814

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8814

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cttgctaate tttctatatt taggggtag agacgggggt tcaccatggt gccacagcgt 60
cctcccgcca cggttttcca aagtactggg attacaggca tgaaccgccg cacacaccac 120
ttgtatctcc tatgcccggt tcaagcagca gcaggggcgt gggaacggct gcacctgcac 180
tgtggcagct cgcaggcctc cctgacgtcc aggcgaggagc tttctcaagt gtgggtgcct 240
tgggtccgac ccaggacccc ctcccagct cccgtcctgt ggaggagacc ccaccatgct 300
tcctcaccac cggttgagga tgcctgacc cctgcccac tgcgccctaa cattactgac 360
tctaaaccag aaccagtgcc ccacctgtc ctcaccgtcc tcaccccacg gcattctgag 420
tgaggagcgc ccaggccccc cactccctg gactcacttc tgtcccccg agagaccttg 480
ccggggacat gtaccacact atgccctcta ctggccaact tancctggg gaaccaatgg 540
gtgaagaagg gaagtcctca cggncagc 568

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<210> 8815

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8815

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aacagtccag ctgtggttta tttggtacat tcataagatg ttcactccta tatatatttt 60
ttccctaggg gtttctcatt tctagattta cactttccct catagcatgg tccctccaag 120
gtatatgctt ccgatacata aaatgtttgt aattttgtta attctgcat tcattagctc 180
aataatttct ctcattaaaa ttctgtaaac tatgaatttc aaagaagtct attctatatt 240
catctgggtc atgaagtttc ctctttgnga atcttatggt agtaaaatga ctttacaacg 300

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tttaacatgg ttcctcacct gtatgaactt tttaaaaaaa ggtatgactt gctgctaaaa 360  
 attttcagag tggttactaa attcagtttt cctgtgtatt gnctactatc tttttgcatg 420  
 taaagaacag ctttctgngg atgcctttcc atatgctggg cattcataaa gntctattca 480  
 gtatgagttt tctggaagat gncagaagga ttcncttacc gagttctctt tatatatgan 540  
 ggntctatcn 550

<210> 8816

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8816

acacttgggt tttaggtatt tatttacaaa gttcttacta atacaattgc ttttaaaatg 60  
 tagcaaagag tcatttacta ctctcagaag tggcacatac atggcataga aaacaatcta 120  
 tagtcagtta actattaaaa cagaaacttg aaatttaagt gacaaacgtt tgtagcactc 180  
 cctaaagaaa taggaaataa aaatgcattt atccatatga acttgattat tctgaattac 240  
 tgactataaa aaggctattg tgaaagatat cacactttga aacagcaa at gaattttcaa 300  
 ttttacattt aattataaga ccacaataaa aagtigaaca tgcgcatatc tatgcatttc 360  
 acagaagatt agtaaaactg atggcaactt cagaattatt tcatgaaggg tcaaacagtc 420  
 ttaccacaa ttttcccatg gtcttatcct tcaaaataaa attccacaca ctatcaaact 480  
 aaatcaagat ttgctagtgg ataaaattac cattaatata ccgactctnt ntggaacagc 540  
 tccaacatct ggttttgcaa 560

<210> 8817

<211> 484

<212> DNA

<213> Homo sapiens

<400> 8817

catgctaagg aattctttta ctgtgcgctt cccatgaatag atacgccgtc aaacaaggca 60  
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gagtttcaag tgaagactga atgtcaactg caggctttcc gaattcctcg accatgtcca 180  
tccatggatt ctcttcttgt ctagatttcc aagcatgaag atgctaacta aagcatttct 240  
caatggggaa cacgaaaaga tttctattat tgtgggttct ccggtgttcc taaaggctga 300  
gttataacta aaggatttca acctatttgt gagtttgatg gtaacgctgg aaaaatgctt 360  
gaagttgtta ctttgctcat tataggagta tggtttccct ccagganggt ttctctaaaa 420  
ttaagagcta ttctacaaca gagaccctn tacacttaag gnatttatgg ganenggcct 480  
ntna 484

<210> 8818

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8818

ctttatacag ttcactttta atcattcatc caaaaaacag tttcttccca tttaaaatgc 60  
ctattcatac atttgagtta ttccctttgg attatcgga gccagattac aaaatttagg 120  
aaatgctacc aagtcctctt tgaagcaaca ggcacataaa taatttaaaa ctctggaaac 180  
aatttttaga accttaatgt gaaaaataga ctttttttta atgcatactc atttctgtca 240  
aaggctaggc taaaagcttt ttgagggtca cactgcgtat accccttct catatgatgg 300  
gtagttttgt ggacacagta aagagttaac ccagcttctt cggggacacc aggtcactct 360  
ttctggacac ctgccatcag ttgccatgcc taacaaaccc ttccctggaa gcagttagaa 420  
cataccttga gagtttagatc catcttggga gtccagactc atactacctt ttggccttgg 480  
aagtcceaaa tgaaagtaat tgggcccgat gatgggcncg atattcatat tggccacttc 540  
gtccttttga taactttt 558

<210> 8819

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8819

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gngtgtcatc ctcagaccag ccatttgcct nttccaaaaa gctggggcta agcatgtggg 60
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cctgggtctc aggagcttan cttctacgga gctcaggtgt catttatggg gttgccagag 180
caagctgtta aagggcgaat ttggtaagac tgagctcana nacctggtgg gagggcaagg 240
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canagcttct ggctgcatct canaaggggg cagacgcaca ggccaggga cagggggctc 360
taggctgtgg ctccgagtgt ccctggtgac tggaaagcct gaagggaagc tggaaactga 420
tacnggatgc ccgtggcttt gtgaaacana atgagctctt tcttntgaa aaagggcccn 480
aaggggaaaa aaaaaaaccc gacnntaca ctgggtcctt cattcctggc ccnggggana 540
natt 544

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<210> 8820

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8820

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cgcatgtgga tgacctggtg gcaactgggac agagagccag gtcacacggc cnttcccacc 60
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gaaggagaa cggaacccca cacccttag gcacctgcca tcggttgtcc tttggaggaa 180
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cctttcggag gcccccatc aggaggcctt ggaaaagccg ccctgcattt gggcctgacg 300
taacgcacgc ggggtccaggg ctgctgagca gacagctgag gaccggntc cagccctgcc 360
cttgtggctg ctggtcctgg gagcctgcgg gtctacctct gcatgtgtgc acacaaggag 420
tggggatgaa cagcgtgctg ggttgttggg aggattcaac aagaaagtgt ccaagtgggt 480

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gcctggncctg gngcccaatc ccccgaaccc antttgcccn gtgaggnggn ccctgtccnt 540  
tgaccatttg ccggggccgg g 561

<210> 8821

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8821

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agcaagctgc tcaagagccc cagttgcaaa atctgggggt taagtaccct ttaggggttt 120  
cctattgggtt acaccctatg cgccaccaat cggaggccga agtgaaggct cccagtctcc 180  
anactcttat tctcctagct caaagaaatc cactgatttc ctctgtagca tcttcagggt 240  
ccatcttgac aacttcctct aaatccccag gggaanagtt gtttanagac tcctggatgc 300  
cctgaggggag cggntccana gcttgcttc cctcctctgn tttcacaacg gtccagcgat 360  
aggcactgtt ctntgacaat ccttcttggc actgtttatc gactggtgga ggccctgggc 420  
tatgttccac tttggggaaa acagtancag anagaggaga atagntcctg gggctctaata 480  
tngggtctan gncctgaaag gcattttccc attagcccca gacaagcaat ggcccn 536

<210> 8822

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8822

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tcttccaatc ctctcattac tgacagatga tgagtcaatg acctttaaac aaggactctg 120  
cgctaggacc ctaaactgta tgttaaaggg ttagtaggtt cagtacattc tttgtgggtt 180  
tatataattg ctttgcaatt gattaaattg ctttctttta aaggaatata ttaaaattcc 240

tttaaaaaaa aagcaacatt ttttgaaaga agggatatgc agctataatt tcttaaatat 300  
gcataaaatg aacatatgtc aaaatcggaa atgctggcta ttcttgact cctaacatag 360  
gaaaatggtt tttaaaaaat taaagaaaaa agccaaacat ccttaactta agaaacttaa 420  
ggagttttca caattcctaa gtcaatattc ctgactaaga gccttgacta tgaagaggca 480  
ggaatntaaa gaacctcaat aaaataaatn cngtaaaaac caaaccaaaa cttgggatat 540  
agaatcttaa atctttggtt ttc 563

<210> 8823

<211> 490

<212> DNA

<213> Homo sapiens

<400> 8823

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ccttatcaag tagcaattac attgtttaaa aaaaaaaaaa agaacagtac atttctgtct 120  
acattccgac aatccaacga ggcgcatgg gtcacatcca gtttgatgag gtgacagacc 180  
cagcagtcac catccatggg catggttctg aggggactgg ggagacacag accatacatg 240  
atacaaaatg attctgcagc aagtctgaag gagcgcagcc tccctcctaa tacataagaa 300  
tgaacgtcca ggtagcagag agtaggcgac ttgcataatg agcgcathtt attaaataga 360  
tagttaacgc actgcttctt actcattcca agttgctgta ggtgctgccc gnattaacag 420  
cagggacaaa agcttcctat gcgcgtttca gcnggaatac tntntccact ccaggcnactt 480  
nttgntttgg 490

<210> 8824

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8824

gagacagagt cttgccctgt tgcccaggct ggagtgcagn ggcgcgatct ccgctcactg 60  
 caagctccac ctcccgggtt cacgccattc tcctacctca gcctntcgag tagctaggac 120  
 tacaggngcc caccactaca cccggctaata tttttgtatg tttagtanan acgggggttc 180  
 accatgttag ccaggatggt ctcgatctcc aggatcagtt tcttgagtct tttctctttt 240  
 gcctcttagt canaatccta agaacataac caggaaacaa atgaggcaag caagatcctg 300  
 ctataaatca aagaactact agactcatga aataatttta aatgcgtggt aacctagagt 360  
 gaaaactaga aattgacagc cccaattttt ttttaagggc anatggtact ttacatcttg 420  
 ggncttaggc ataaaactat ctggaacaaa aggctangga tcgagtcatt ataaaggcac 480  
 tttatgccta aagatttcaa acttggagct ttttaaggga attgggggttc acttanttaa 540  
 acaccagtng gaat 554

<210> 8825

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8825

atattttagt gcacaattta ttttaaaatc cacacaagaa acccagaaat gcagcattat 60  
 cttcagacat cacattctag ctctgtttta ataccacata tgctaaaaac cgacgccagg 120  
 acattctcta aatgagttac aaatcagttt ctggaaagga agtgctccat gaaaagctta 180  
 tagcaagata actcaggctt tcagggtggcg tatggcacgt gaattagcct tacagtaatt 240  
 gtgtacatag tatgttttagt cattattgaa tcaaaagttt caggaagtac cttttttaat 300  
 gcatacgctg agagaaccgt caatatgcct ttgttctctg tgagggatct gccattctgg 360  
 aggtacaaat actgcagata gaatatcacc gcaggactac gtcaagttca gagtgttcag 420  
 gatcatttct atataaaact acaattagct gaactatggc aaaggtcctt gaacataaag 480  
 ccttcttcat tcattggatc ttaataagtn gaaggcncta ccggaaagct gnttaaagga 540  
 ttttaattnc tccagttttg att 563

<210> 8826

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8826

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ccattacagn gcacatttat tgactctgtg tatcttcaca gtgtgatctt caccacagct   60
tgcaaagngt aaccactcag caccttctgc ttccttctgt tcagtttttc cactgcaatt  120
cttccagcat aattttctga tagccagtgt atgactttgg ctttgacttg tttctacaca  180
gngggtccag tcatttatTT ctggaacttg atcagtcttt ttccaggtat ataagcaaAT  240
ctttccacac tccaatccta ctgcaaccac gtatcgttga gaagggtgga gcactgggca  300
gacgctgaca gctgtcacag cccacccac gtccaggact gaggagcagg ggccaatgtt  360
gtgctcaata cagtcatcag tggagtcgca ctcaccccag acaaccacct ttttgtctcg  420
actcccagtg aagaaatact tgctgtcagg actccaatca caagaccaaA taattctact  480
gngcacagaa gtaatttggt ggggtgaaggc aaaaagacta aaaactggct tgaactaggn  540
gaaaatggga tcccggTTTT tccaaagn                                     568
```

<210> 8827

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8827

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ccagttaaat tcagttttat tgttttccgt tacatgttca ctccctgttc cttctcgccg   60
cctgggtctgg tgggggcata ggagagggag ggaggactga aggtcataca tttctgataa  120
tgtcgctttc taaagggtcg tgacattttt gtacatcttt tccatctttt agtagcaagt  180
ggttgctgca gaccagaagt gaaccaaata aagactcctg ctctgtgcag ctctcagact  240
cctgctctgt gcagctctca caaagatcac agctgctttt gtacattcca gtaactgcat  300
gacacaaaac ggtacctgtg agcaggaaac acattcacac catgagacat gcacagaggc  360
aggtgtccct gagcgaagtt gtgcagagat ctaggcctag gggcagtcag ctccctgccg  420
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aacacaacct agaaaaccaa ggcgagaacg gccccttgcc ttnacancg agggcanang 480  
gcaaaagccc tttcctgnga attccaggag gattcancca agggtaaaag ccccgggtct 540  
ganaaaatcg aatc 554

<210> 8828

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8828

gaaatgtaaa actcagttta atttcaagtt tgtatagaga atgtatgcca cagtttgtat 60  
tttataaacn caacctatct tattataaat ncaaaataag aaaaagngat ncgtagctg 120  
ttatgaagg ngaaaacatt atataaacct caaaaggctg ctttctgcat ctgcatctat 180  
gtaatttcat ggttctntac caatttcatt tacagaaata atctctatag tcaaattatt 240  
gntcactttc atgccccaac atgggaagng gtaggnga atctgtagga atncaattta 300  
ttggctgctc ctccactcan aagtagccct gngtctgtcc agtctacact canaactttg 360  
ncttcatgag cagccagatc atagagagga gccttacaac ttcttgatc ccacagctta 420  
acaatgttat ctaaagatcc tgaaatcagc tgctgttcat ggtagggag accatittac 480  
tgggggcacc caccngtntg tgacgttggg gnnagggacc ccaaggaccc atnttngtt 540  
ngggac 546

<210> 8829

<211> 498

<212> DNA

<213> Homo sapiens

<400> 8829

cactacttaa tgcattta atccaaccct cattggaatc atcttggtta catttaagat 60  
tctacaacag ttataatgcg acgattcaga ggtgggtctca aagttgttac agtgtaaaa 120

aaattatagt aagcagtata aaattacaat ttattatggg gccaggggga ttcacaacca 180  
 tccttaaaaa cattaagagc aaaccacggc caggcatggt ggctcacacc tgtaatccca 240  
 gcactttggg aggctgaggt gggcagatca cttgaggtca ggagttcaac atgatgaaac 300  
 cccgtctcta ctaaataatac aaaaattagc cagtcattgat gtcgtacacc tgttggtccca 360  
 gctactcgga gggctgaggc atgagaatcg cttgaacctg ggaggcggac gttgcagtga 420  
 gccaaagatag cgccactgca ctccagcctg ggaaacagag cgagactccg tctnaaaanc 480  
 aaancananc anngaaac 498

<210> 8830

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8830

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 ccagctcatt aaaatctatg tttcaaattc cctggatttt cccaagttcc agactggtaa 120  
 aaagtatttt tacatacaca ttgatgctc acattacaaa cttaatatct ataaacttga 180  
 aacttgtttt gcacaagtct atggctttac tacttttcaa gacaaaagtc acatattaaa 240  
 atacaaacta ctcaaaagca aatagttgtc aagaatgtgg ttacaagac agatcttaca 300  
 gataatacag actatattat gatttatctg ttgaaaaca gaaagtagtg tattatactg 360  
 aattctggta taagggtgcg aggaaacttt acttacaatc ctttattttc ataaggtaaa 420  
 caccaaagta tttctcacat atattaccac cagatttttt ttaaaccaaa tttccggttt 480  
 aaaaatcaca cactggccaa cacagnaatt cgaaatgcta ggaaaaggct agcatntgaa 540  
 ggaaaacctg gcttaagcnt tctaa 565

<210> 8831

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8831

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agtacgtat tagctgtcca tccttctggg tagaagtgtg ttttcgtttt acttggtgat 120
ttttggatgc atgctggggg aggaaagcat attgtttgtg gtcaccctgg cgtgctaagg 180
tatattattc cccagtaatt ctctcaaggt gggcatatgc aaaacataat ctctaaattc 240
ttcaatacta agaaataacct ttgttttacc cctaaaatca aatgccattt tggctggata 300
taggattcta ggattaaagc ctttttccag cagaactttg aagacattgc tccatttact 360
tctagcatcc agtgtgtcca gtgataagtc tgctgtcaac ctgattcttg ttccttggtg 420
ggtaatttct cttctctctc tagaagccct taattatttc tctttatcac tagaattcca 480
aaatttcacc aagaagtgtc taggangcag tctcttttat caaattttac tanggnacct 540
cgacaagcac tggcaatttn ag 562

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<210> 8832

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8832

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atttgagaca gagtttcaact cattgcccag gctgggggtgc aatggcgcaa ctgtggctca 60
ctgcaacctc cacctactgg gtccaagcaa ttctcctgcc tcagcctctg gaggagctgg 120
cattacaggt gccgccacca tgcccagcta atttttgtat ttttagtaaa gacagggttc 180
cactatgtcg gtcaggctga tctcgaactt ctgacctcag gtgatccaac cgcctcggcc 240
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ttcactgtag tcttggtcct ctttgaatgc agtctctctc ttttttttg gggggggggg 360
gacagtctcg ctctgttggc caggctggag tgcagtggca tgatcttgac tcaactgcaac 420
ctctgtctcc cgggctcaag caattctctc ctacctccg agtagctggg attacagggg 480
tgtgccactg ggcctgggta attttggatt ttagtanana tgggggttca ctatcttggc 540
cagctgggct tga 553

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<210> 8833

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8833

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aaagttagtt aaatacagtg cctagaagga acagacggcc cagcgcaaca ggtcgaggcc 60
tttgtccttg atgatttttt tttcctctgg ctacgttcag tccgactgag tgcagcgcta 120
tgcataatgta aacatattcg ttaaagccga tcacctttaa ggtcattcgg aaaaaagcgg 180
tccttgtttt cgcgggtgtg gtgtgggtcg taacagcagt ctcatcctcc cgggaggaag 240
gctcttgggc gttggagagt cccactcggg ttgtgccaca ggacaatgtg ggcagggcgt 300
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acccgtcgta ccctgcacct tgccggcgct cagcaactgc cgttntcgc ccttcgtcca 480
nagcccgcgc cttcttgccg tcgcgcaccc cttgttgttc gcgcgccaag cccgggcaac 540
cgntgcc 548

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<210> 8834

<211> 350

<212> DNA

<213> Homo sapiens

<400> 8834

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aagttgaaca gaacatttta tttctcagca attctatgcg tccaaattaa acatgagatg 60
aatagagact ttattgagaa agcaagagaa aattcctatc aaccccaagg aggactcaaa 120
gtgaggctgg aagaggactt agaagagtat gaaagtcctc taagatttta tctaagttgc 180
cttttctggg tgggaaagtt taacctagn gactaaggcc atcacatatg aagaatgttt 240
aagttggagg tggcaacgtg aattgcaaac agggcctgct tcagtgactg tgtgcctgta 300

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gtcccagnta ctcgggagtc tgtntnaggc caggggtgcc agngcncnn

350

<210> 8835

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8835

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cccttcaaaa acttttattt gtatcaacag ttcctagctc ttgacttagc ttagagcttt 60
taaaagagca gacaccttat atatttgaga ttgaaaaagt ttctgctatt aatcagaaat 120
aatcatttct attttctggc ttacccttg gaataagcca aaaataaaac caaagttaca 180
tttctgaca gatggctaag aaaacaatag aaggaacatc ctgaattcta gagttgactc 240
ttgctggtga agtacacctt cagcttagtc cattctccta agtaaagcct gaaggaaaac 300
tcttaacacc taattctttg tggaaaaatg atcaactagc catttcacag gctatagaac 360
aaaagtacaa ttgggcatct ttccttatgt cctgggatca ggggtgctta catttaacat 420
tgatcaggta aagaggagag gctgtgccta aggtctgaga aaaggcttgc tctaagcaag 480
ctgnggtgag gcacaggatg actaggaat ggcaganaac angntggcct actgtcagnn 540
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<210> 8836

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8836

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gacgcataaa ccaatTTTTT tncctcatcg atgttncaaa ccacttaagg aaatgacatc 60
attcangaac attgggctac gtgtcatttt gcttaaagtc agtttctaan aacctttcga 120
tggcatttaa ggacttaact ggagttncaa ttgagtgcctt actatgtgtc ttgcacctnt 180
gaatatttaa cgtnttacct catttaactt tcacaacaac aacttatgta ggnagtagta 240
taatctngat ttactgaag aggaaacaaa ggntaatctg gccacggtca ccttactagt 300
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gagtggttgg aacagatatt tgagaacagg caacatggct tcaaaatcta agctcttgcc 360  
taccantaa ctactccctt tcaacgaaag actagtacgt tatttgaacc tgaataccct 420  
gaaagtaaca agcaaatttt ataattcctt ttctgttgn cagcatattn canattggca 480  
atgganaaat tctttgtttg ccnccaattt ttagaannaa tggggg 526

<210> 8837

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8837

aagaacaaag ttttgggcaa actagtaatt tatttacaat tgtaatttat aaacagtaac 60  
acaaacatct ttacattaat attatgaaaa atgtcccatg gctgaaatgg gtgaaaaatg 120  
agacttcagt acatttctaa aggggtgcca agaaaaggga aaaaatgcaa ttacaacagt 180  
tttaggggag agttatatca agtaatgcac ctaggtgcaa tttcatgcag atgtcttcaa 240  
ccactcaaac tgtttttatt agatattaga ataaaatttc ccaaattatg ttgcctttta 300  
ttcacttgat ttccataagt aaatcaaaat gactggctgt taacagggtta catctaaata 360  
tttctcccat caaccctta gagataatcc cttacatttt aggacatgtc agattgtggg 420  
tattgcaact tcccaaattg atttacaaa atactattcc atggccctaa atgtgttcct 480  
ggacttctct taccaaattg gctaatatgg accattataa attaaatgaa gaacgctgca 540  
aaatccgcag acaatttcaa gacnnttaa 570

<210> 8838

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8838

actgaaaaac tcagacttta ttacagattaa gttcctctac aaaaagtagg gttctgtccc 60

atgtgtctct gacncattta caaaatacca gttttttaaa attttgggtca aattatgagt 120  
 ggttgattta aaaacttttc caagaagaag aaaagcatgg agtcgtaatt taaagaactc 180  
 aataaaaaact tctatTTTTT attttaaaat aatatacnca gngttatttt ctccaagacc 240  
 gtcctgtgga tgtgaaatcc gtcttcgcgt catgtatctc ccatatccag cagttcagcc 300  
 atccagctac ctttgggacc ctgctgcacc ttgngtttgc tggggagtca ctggagagtg 360  
 catctctgtt cagtttcagg gcacgtctca cacatttgct gntccttatt cattgttgac 420  
 acaggggata ggtgatccac tacttgcctgt anaatgncct tactttcact aggaggcaga 480  
 ttactgaaat agtattgggg gaccagctgc ttaaatagtt ccaggagaag attctgaggn 540  
 aatccnggaa gnantggctn 560

<210> 8839

<211> 515

<212> DNA

<213> Homo sapiens

<400> 8839

catttgaaaa atatttattg agcacctgtt ataaggggct gagaaccata aaagacacta 60  
 ggggtacaga aaggaataat taagacggcc tgctcttgag ctcacagtct agtaaggaag 120  
 gtaaacataa acaaatacatt acaatacaac aggaaaagag ctagagcgaa gatatagaac 180  
 aattgcacag aggaaagagt aactaattct gcctgaaggt aacaaggaag agatggcact 240  
 tgattttgaa gtttaaggat gagtgatatt ttagcacggc agagggcaga gggggcacag 300  
 ggcattccag gcagagggaa tagcatgtgc aaaggcactg aggtaaaaac atgagcatgg 360  
 ttggttcaga gaatggtgtt gaagggtaca cagaggcggg ctgtaaaggg tcttgtagac 420  
 cacactagga agtttgaatt ttatcctgta ggcaatggga aggcttcaag cccacatctc 480  
 tccatctggt cacangntnt cntaanagnc tntgt 515

<210> 8840

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8840

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aagctgagac aatgtatcat agtcctatac acttctgagt aaggattaac taactagggt 60
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tgaacatgt gcttggcaca ctgtagatgc tcaacaaatg gcatcatatt acttcctaga 240
gtcgggagaa gttgtaaaat gaccagcttt cttatgctta ctcggagtat tattctggcc 300
tttctcataa tggagacagc ttatcgatt tagttgaaga aatgctgaaa attgggggtg 360
aattagacat tatgttttaa agttcaaaga gggccagact tgcgatgac cagaaattag 420
aagaaactag agctttgaga accaggaaaa ggccgattgg aacaaaaaaa gaatgaccag 480
gaaagatcaa atttcctagg aaatgnatat acatgctgat ggcataagga naggctntgc 540
tganaaggat tgggnatgtg aagggtaan 569

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<210> 8841

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8841

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aaagtaagaa atacttagga ataaacataa aaaaactgan aatttcacac cttgaaatct 180
acaaacatta accaaaatga ttaaaaacat atatatacaa cccacattga tggtttggaa 240
aatcaatat tggattata taagccaatg ngattcanat tcaacacaat acctataaaa 300
accctattg gtttttgtta aagaaacaaa aagcaggctg ggaaaagtga ctcacgtntg 360
ttggccaggc tgatctcaaa ctcatgacct caagngatct atccaccttg ggctcctaaa 420
gtgctgggtt tacaggcgtg agccacacgc ctggcccaat cctnttaaca taaacncttt 480
aatgncaatt aatgcttcac cggaangttt taagtcactc aaactcaagc caattctgga 540

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atggctttct ggcaa

555

<210> 8842

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8842

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tgcgaccaca ttctgaatat ttaccaatat tttttaatat taaggcagct gttagtcgga 180
tgtgtttagt tattggtccc tctttttcat ctgtaaaatc tcgaaagaca aggtttcttg 240
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cttgctcctg ttcatcttgt tttaatcctg caagtagggc atcctttgaa cagtgcctat 420
cctgcaagtg ggtaataaaa gaaaaccgct gtcgctgaaa aggctcacia ccttcccaaa 480
gacactgccc tggatataca tcttttcctc catgtcagtt gctgcatggg tagaaacctg 540
tgganggtgc tggaaaccct ttttacna 568

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<210> 8843

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8843

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catacgattg gtttaatttt tttttcagca ggagaaaaaa gaataaagtt acaagattct 60
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ctagaacaca aaagggttaa ataagatttt ctcttttaaa gatacaagaa tttagcttt 180
ccttacattt aacaaacttc acagaacaga tactgcaggg gaacaagccc cccccccac 240

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ccccccagc tctaagtcag gaagcgaaca tgggcttcgc tccccaggc cagctcccct 300  
 gggctccttc ccatggctgc ctccacgcag caggcagagg agggggcggg gggccctggg 360  
 gagggccggg aagggtcgc acagcctctt cgggaccaga gcttggcgga agcctatggg 420  
 gggctgcctc actgaggatg gccgtatggt ggcaagggt gtggcttgac agcantggta 480  
 aacgctgggc anacctggcc cctntgcct gggnttgcct anancaagaa anccggtctg 540  
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<210> 8844

<211> 485

<212> DNA

<213> Homo sapiens

<400> 8844

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 tcagttttca taaagtgcaa taaacaaaat aaatagatga aaaaagcttt gaagatttat 180  
 atacagtttt gaggttaaga taaattactg actatattcc tttcagcctt ttaactctgt 240  
 gaaagctgta acgtacatta aaagcacatt gaactagggt aaataatgat ctttccccct 300  
 tagatcaatc tagtattaag gagtatataa ttatgcaagt tcattctata acacgaggct 360  
 agactaaaag gaaaattttt gngctacaga ctaaattccag atncggtcag gtgctgagca 420  
 gaattccngg ttcaaaatag gaggttctg gtncatcatc nggctggggg atgaaaggcn 480  
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<210> 8845

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8845

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aatctaagtt cacaaatgat catcacatga gccctcttct ccatatacac atttgttagn 120  
gngaaaaaac aattttgtac agtatttttag tagttacatg attagcaagc aacagagaag 180  
tagtgaaagc tgaagaactc caaatgcatt gctcatagga caaccactca aacacaagca 240  
gctaggcaat aaaggaaaat ttcccatcca gtcattgaga aatgctaaag gcattttatg 300  
gtgacatgaa tgcttaagtt agtatgcaac ctatagggca aataaaactg ctatataggt 360  
tggtaat ttt gcatttaaat attngtagta tgggtctacc atttatctaa catttanta 420  
tacataaaat ttttaagtctg ggttctcaaa acggtngctt gggatttngg tatagggggc 480  
tggtatctca aagctcattc agtatctttn cttctttcaa anggttaatg ggactggngc 540  
aatggttgga a 551

<210> 8846

<211> 693

<212> DNA

<213> Homo sapiens

<400> 8846

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agagccccct tcccgtttac aggctggacc agttacagtc ccgggcagga gaggtctggg 120  
attgttgatg aaatgggggtg ggggcgggtg gtttggtctg tgataatgaa ggaatttagt 180  
gcagccaggg gttaggcctg ggacctgcct gacaggatgt ttctcacagc tcaggccctg 240  
gtggaatttt ccactctgac cagtttgtaa aatggtaggg gtctgcaaaa tagtgcagtt 300  
tgggctaaca ttcttatttc ttacttttagt ataaaaagga aaaagggcgt cgttgatcat 360  
ctggctgctt cctgctggat aggggcgttg tgattagggc ctgggttctg gagcttccga 420  
atggtttcct cgtaggctct ggtattagac gtggcaaagg tgaaatatat tatcaatgtg 480  
tttttgcatg cttgcctgga taaaacaatt cagccttttg gaaatgaanc gggatacaag 540  
gttaaataatg catggcccaa tcattagtaa caggaagagg aagatcaggg gtcctangaa 600  
gggggcaacc cagggtatcc atcttanaag ggatgatcct tgccccagga ntcancgact 660  
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<210> 8847

<211> 832

<212> DNA

<213> Homo sapiens

<400> 8847

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actgaaaact agttttatTT taaaattaag tgcatagcac tcatctaatt ccattggtgt   60
agacttttagc accatacttg ctatttgcaa ttaatgtcgt aacacagata cattttggtt  120
tgcagtctgt acttgagtag tgtttattta gtggactttg gtaaagccct tcatacatat  180
taatctcttc acagtacaca tttaatgatg gtccagtatt ctcaaaaaaa aaaaaaaaag  240
cctactttta agactaatca ataaattaaa caaaacaaaa cccaacaat gttccccac  300
ccccaaaagc tagcagttgt gagttgtatt tatattgaaa cctaattgtt taaaaatagt  360
tctggttctc caaccacccc atcccacccc gggtatgcag caatagtaat caattatTTT  420
attctaccct cccaaaagat tattaatcca gtgttcttta gctttttaaa atataaattg  480
ggaaagtgtt attaataagc ttttttaaaa ggcataattct tctataacaa gaatggcata  540
taaaccaatc aataaaaagta ttgacaaga cattaagtta ccacaggcac tggctgttgt  600
ttcaagttgg gatctctatc ccaatatctt acattcatag cattattgag gtagttaaaa  660
tactgaaaat tggactccag gttgctgggt tctgaatgng aatgtgaaag gatataattct  720
cttttgagcc tactttncce caaataattc aaggtttctt ggggtaagga acttcccaaa  780
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<210> 8848

<211> 599

<212> DNA

<213> Homo sapiens

<400> 8848

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gattcttatt tttttaatat aatttatctt gctgagatag caagtcaagt ttataaagaa   60

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gatgcattta ggaataatcc taaaagataa agcaggttta caaccctgca ccgcgcanaa 120  
 accctattaa taggcttttt tttttaata cacatttgta tcttgacctt ttcacttggt 180  
 tttctcaaat atttcatttc tgggccccat ccattacagg gttaccagga ggcaaatttt 240  
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 tcataacaca attattcttt tacactttta acaatataac ttctcccgtt cagaataaat 360  
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 tgggatttng gaaaggtttg tttaccnct cctggaattg ccttggcccc tgcaacnccgc 540  
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<210> 8849

<211> 600

<212> DNA

<213> Homo sapiens

<400> 8849

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 cacagaaccc tccanaagaa taaaggggtc acaaaaaaac tggcctgana ntgctgancg 120  
 catcttcttc ctcgtgtatg tggttgggggt gctgtgcacc caattcgtct ttgcaggaat 180  
 ctggatgtng gcagcgtgca antctgacgc ancccctgga nangctgcac cccatggcag 240  
 gcggcctaaa ctgtaaaggg gcagggcctg ggctgcacac cttangatna aatttgcttt 300  
 cccatggctg ggggcgggcc atgacagggc ctctggatta anccaccctg agctctccct 360  
 ccgctagcac acaancacan aacgtgaaat aaacccatct ccagtgaag tgtgcctcaa 420  
 gggtcagtct tcaatctcnt cctaaataag ttgggnccta tttttgctt ccaaccccca 480  
 ttttgctcct taactttccc cattgtcctg tttccancc cacaggcang cagcctaatt 540  
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<210> 8850

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8850

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aattagtaaa acagccacta aaattgtttt tatggtttgc tatcacaaaa gtcgaaggat 120
tgctagaatg ctgtttacct gtttcaacag ctcccatcaa ctaccgctac tcactttaca 180
tagaaataaa aacagctact attcattgag cctattttcta tatgggaatc ttagtgtcct 240
cacacacatt aattcactca attctcccca aactctatga ggtaaactat tatgcccatt 300
ttagactcaa atgtcaaaac catatatgca ttttgttcca ctgaccccaa gtggtaactg 360
tgagtagtag ttctaacaat gaggcatttt ttaaaaagtc ctattaatgt ttacctataa 420
tttaacctat aagggataaa cccatacccc cattgaacat ggtacttttt tccatttatt 480
gtctaatatg tggcaacagt aaatgaacaa tctcatcctt aaaacaggtg ttatgacttt 540
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<210> 8851

<211> 591

<212> DNA

<213> Homo sapiens

<400> 8851

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cgtatttgag tcagtgggtca gatggggcag ttgcgctcag ctgcagtccc tgactccgga 180
aacactgtgc ctctcaaatg atctagagct catccttggc gtacatgagg ggcagttgtt 240
gttctagtac ccatttagcc catggctctt caagccaatt cacactggga aaaacacacc 300
ctcacaagat gcctatccat ttgagttcat acaggtttta gtagctagaa ctaaaaaaca 360
tttttaaa at tcttaaaca aattggtacc aaagaaaact tgccatactt aaacagtata 420
tatgttcct tttttggctg aaaaattcaa gtttgtgcta tataaaacac taacagttac 480
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taaagactag gaaaatttgc agganaaagn tattttaaac ttcccaataa tcctaaagga 540  
agccaattat aaaactcnaa taatgcnta cttacttata ccnctntttt t 591

<210> 8852

<211> 599

<212> DNA

<213> Homo sapiens

<400> 8852

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ccactgcctc tgcagtatca aanagaatta gtctttccac aaaacagatt ttaacagcca 180  
atctctggat ttctgtagtg gctttagtca ggcatattta tcatcatatt agcagtgttc 240  
agttcctgcc caacatcttt atttaatccc aattcaatgc ttatggatgc tcagctcatg 300  
tttaatgttg caagcccat cttagcccat ctttaattcaa acagaaaaga aacaaaacaa 360  
aacaaaaaca aaaaaggtac ctgcctggtt catggatccc tagccatcca gggaccaa 420  
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tcccagatgt taatctancc atagtgtccc tgagccttaa tccatgtgtt taccacatac 540  
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<210> 8853

<211> 604

<212> DNA

<213> Homo sapiens

<400> 8853

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ctgtgccccca tccgcctgg gacanaaacg ggcattccang gtgctgaaac ccgggcaggg 180

aggctactgt ggagaccagg cancagtgt gtgggcccc agcagctgtg actgccctgg 240  
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 tccgtggctc ccgaactgtg gcccctgcag ggtgcaggan gcancaccga ngttcccgta 360  
 cagcactgac ttgaaggaat aaccgtgggc tggggctaca cntgtctggt gcttgcccaa 420  
 ggggatcttg gctctccaaa aatcntcttc acctgggcag gtgccaaagc ccccancccc 480  
 acggccacca acacaaccgt catcctccgt actgttnanc caaaaccncc gttgaaccaa 540  
 aaccnccng aaccaccaac aaaaccgtca tcccccnta cntttaacca aaacccccctt 600  
 aacc 604

<210> 8854

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8854

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 tgtacctttt attaattctta attgcataat cccaactttc aaatttataa agctcanaaa 180  
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 tcttaaccac agtgggtgtat tgcctaaacg tcttgttct cgtgatttca agggataaaa 480  
 tatancagtt tatatttcta ctaaatttcn ccctacacaa atatntcccc aatctactaa 540  
 ataccatctc tataacaaat ctttgttnn ttagggccat ttccna 587

<210> 8855

<211> 592

<212> DNA



<213> Homo sapiens

<400> 8855

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caacctctgc ctcccaggct caaacaattc ttatgcctca gcctcccaag tagctgggat   120
tacaggcacg cggcaccaca cccagctgat ttttctatit ttagtanana tgggggtttca   180
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aaagtgtcgg gattacaagt gtgagccacc acgccccgcc tagaactctt atagagaatg   300
aanaatgcgt tttgattttc ttttttgc atccaanaca ttgcactcaa gtttctgaat   360
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aaaaaccacn attagttttt gcaccaacct aacatttagg aaaatggana ntcccccaa   480
aggtgggaaa ttcctgtctt ttncatttat gctgtctatg gtcancacta aaacaacagt   540
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<210> 8856

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8856

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aaaaaacgt gatctggctg tcgcccacac tggagtgcag tggggcgacc atggctcact   60
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ccacagacac atactatcat gtcagctac ttttacttct ttctaaaggt ctactctgc   180
tgcccaggct ggtctcgaaa ttctagccac aagcaatcct ccagcctgag cctcccaagg   240
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atgtgactct tcaaactgca gattccacct gctctgccgg acctggacac acacttctcn   480
caaagggagc catgaaatct gtgcttccaa atcactggtc taagcaacct tcactcctac   540

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tcacaaatgc caagaaaata aaatg

565

<210> 8857

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8857

cattagaaag tcttatttat ttattacaaa agcaaagctt cattcacaat atgaactgca	60
tactagatat agttatttct gcattaaact gctttccgga atccctaaac aatatagtgt	120
attgtacaac cataatgcaa gttatgtttt gcatacaaaa tatgttcttt acatcaaagc	180
acatgttaac aaaaacaagt tctagaaagc atataccctc taagactaat gaaaacgtct	240
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tgaggatttt atctctgagt attttttgta gtattcccct tgtccagttt ttgcagaaga	360
atggcaaaca cttattttcta aaatgaaata gccctggaaa caccagtggt aattttttca	420
aagtaaattgt cttagccttaa cttgaagttc aagaagttgt agctacatac tacattagta	480
aaatctgaaa taaaattatn ccngttttaa cccctccnca gttcctaaaa aaatnttatn	540
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<210> 8858

<211> 594

<212> DNA

<213> Homo sapiens

<400> 8858

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tttatataca agtcttaaaa cacaacaatc atgaacaatg cacaccgttc aatgtagtta	180
ttgctagtta tatgcagctt ttagttacca ttgttcttct ctgtaaggga aaggacagca	240

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aataagctca ctatgagtag aataaaacgt gtaagtttca atcagtacta caagaaagca 360  
tggttttaaat ttgagttcca tacaattcta cataactcta tttgttact ataacanaaa 420  
tacagtgtnt agttttgggc aanaattaat gaattactgg ttttataatt aantgaaaan 480  
aacagttttt ggtgccatgt taaaacnaaa ctgnatttct ancttacaac cttaaaaatg 540  
gaaaaatttt atgtttaanc aaaaccgaac ccaggtnnta ccttaaaatt aaaa 594

<210> 8859

<211> 379

<212> DNA

<213> Homo sapiens

<400> 8859

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gttctctccc tgatgccctc tttggtcact ntgnnaatcc gggagtgcgt cccnngtgta 180  
canatctctc tcagccgcag aatgaagac atctttcacc acccgcatgg ctctgtccaa 240  
ggacagcgga acatgctcca cattctgggt gttcttaaaa ccaaccnggt tgtcaancac 300  
gggctgtanc atggcacttg ctgancctcc agccttgaag gantctctct ggtaanacct 360  
actggatcta agcngtgta 379

<210> 8860

<211> 601

<212> DNA

<213> Homo sapiens

<400> 8860

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attatactgc cattctataa actcactgat acaatctgcc cgggattcct gttctttggc 120

caatcgaact ctcttgatca tcgcctcaat ttcattctcta gcctgcatca catctctgct 180  
aattcccaaa accttaatca aaggctctctt atgggtccagg gaaatggtta tatttaactt 240  
cttctgcagc tcattcaact cctgatactc cttttcatca aagtctttga tgcactcatc 300  
ttcactgggtg taaggacact gttctttttc aatcagggtct tntagccagg agatagcgta 360  
ttccacacac gtgacatttt caccacacac ccgaaaagtt gctgattctg ttttcttttc 420  
caaaacaaaa tgattctttt ttgggggaga ttgctttgaa aagcccaaaa atgatgcaag 480  
ttagacatc acagactgtt gggaaaaaan ctgaatccct ccccttcctc cagttgggna 540  
tnaaaccatc cattacttga aggcgaaaaan anaaaaactt taactttttt caanaaatgg 600  
g 601

<210> 8861

<211> 613

<212> DNA

<213> Homo sapiens

<400> 8861

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atgcacatta aaaccaacag gtgcaaaacta caacaatgca tataattata caaatgatgc 120  
cactctgtga tgtttacagg attgctgtcc atgcaagggtg atcataggca ttatttatga 180  
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gttttggaag gcagttccat gagttggcta acattttctt aaagcaaagt actgcttcta 300  
agcttagccg tacaagagat ttggttgaa ctgaaaatat tagtatttca ttactgtgtg 360  
cagctctgtg atggacaagc aagttgttg caccatccacc aaaaacaatt acttctcctt 420  
catcgtgtgc acaagctgtg tgccataacc ttggtttttc ggtatatgga tgattaaatt 480  
gtatcccatt ccattttttac tgatgccagt aagttcccag gcactnactt aatggctgtt 540  
ttannantgg ttaaattccc ccanaaaaaa aaaaaaaaaat cgnaaaaaac nggggtttat 600  
tgaattgccca aaa 613

<210> 8862

<211> 160

<212> DNA

<213> Homo sapiens

<400> 8862

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ggcgggggga ggggggaaca gagcctcgct ccgtcatcca ggctgcagtg cagtggcgtg   60
atgtcggctc actgcaacct ctgcctcctg ggttcatgca gttctcctgc ctcagcctcn  120
cgagtaacta gnactacang catgcncnan cattccccacn                        160
```

<210> 8863

<211> 585

<212> DNA

<213> Homo sapiens

<400> 8863

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gttctctgac aggtttatta gctttcatgt taatggatgt ttttaaacc tgcaaccctc   60
tgtcaacttc tttccacatc aagaggccat ganatacagt aatggcctct taagantcat  120
gccacataaa gatgatgact ttgatgtcct ggcctgcctc ctgtaacaat gtgaggctgt  180
tttgggcaca tgctgtaata acaacaggac tatcacagga acaatgaagc aganaagcag  240
aaggtgccta caaagtttta cctaaatgtc ttgtttgtca ggatggagct gatgcgcccc  300
tactggcaga acaattagca cagagtagtt ctgaaaagga ggaagaattc acagagcatc  360
agttatgggt gcaggaagt cgccatctgc caatgggcac canantgtca ctgtactgga  420
aggggaaaaa gaatgggctg gatnaaatcc aagggcctct ctgcccattg tcaaagtcag  480
taactgctct gcctgccggc tcacaatgca tgccnanttt taatnacncc cccccaaaat  540
ggggttnatc ancttactta gtcccncaac ttcaaggaac ggta                        585
```

<210> 8864

<211> 495

<212> DNA

<213> Homo sapiens

<400> 8864

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ctgattcaca cgaataactaa cgtttaatcc tgttttcaaa gtccaagatt gaaaacttgc 60
aattaaacac tgagcaagcc acatgtttta gtaatatattc ttaaaaagtc ttaaagaaaa 120
aagtatgata caggacctaa gttttcagtg gcatatatac tattaacaca tgttctgaaa 180
tctggtaggt cacatcagtc ctgaattaac ttttaataat aataataata aaaaaactaa 240
ctgagcttta tactttttct atgccactat agctttcttt cacctcattt tttaaatgtc 300
gatcttcact ttatgccgtt ctcagtattc ttccaaaaat cttcgaacag tagtcctaca 360
acgcaaagtt tggggaaaaa tgataattag acaacatgtn taaggccaat ttttatgana 420
aagtgttngn ccagtcacta actggctaata naacatgttt tcatggaatg cttgtntcct 480
ttttaattat caang 495
```

<210> 8865

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8865

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cttttttgag atggagtctc cctctgtcac caggctggag tgcagtggcg tgatctcggc 60
tactgcaac ctccacctcc ctggttcaag cgattctcca gcctcagcct cctgagtagc 120
tgggactgca ggcgtgcact accacgcccga gctaattttt gcagtttttc agtanagacg 180
gggtttcacc atgttggcca ggatggtctc gaactctcaa cctcataatc cgcctgcctt 240
ggcccccaa agtgctggga ttacaggcgt gagccaccgc acctggccca gatttttata 300
taactgattg gcactcaata ttacttgctg acagtttctt ctcccttctt aatatgagca 360
ttgtatataa ctggaattaa tattcattct caaagcatat atgctacaaa tggcaaaaaa 420
ttacaaactt gtaaatagcc acctatctca aaaactgtta acttgtggca antaaaaaaa 480
ttaccgctt catttgggtt ttaatccatt tagtcagcac attttcatca ancacctact 540
atntnttngg caagcattgt nanaaa 566
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<210> 8866

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8866

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gtggaatgct cacagcctct tcagtgtttt cgatcccaac aaccagcaca taaacatctt   60
tcaatgtatg attaatgtta agcatatttc cttaactgaa aaagaggcta aataatcaca  120
ttggctaaca ttttagcagg taataacccc atgcttgtaa gcactttaca tgaattaact  180
cacttaaatg cagagcaact ctatgaagta ggtacttttt tttatagtca tagagagggt  240
aagtaacttg tccaaagtaa tacagagtat tacctgggaa ctagaatttg aattgagaga  300
gtgttattaa tctgtgcaat taaccactac accatacctc agcaaaaaat atctactgta  360
ttaagcctgg aatagaagac acaatcaata aaatttanca tgagggaagg ggcaagatgg  420
ccgactagag gcagccagat agacagggat gactggccac ttctaaaagt ctccaaaagg  480
aaggccnttg aaanacccaa ccncttctcc atngcattgc tctctcctga cttgggttagg  540
anccncctat taaanacctt cc                                           562
```

<210> 8867

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8867

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aacaatttaa aatatttttaa atgacaaaac aattaaatga caattaacaa taatgttagc   60
ctataaagct attttctaaa acaatttggt aaggagagta acattgtttt atagttctac  120
aaatctcttt aatgttttagc ttgatagaag gcagctgaat taccatacct gcttctgcat  180
tcaacttgct gcaatacatg ttgtaaaacc tggctccaca caggtagata tttggaaaaa  240
gaggggtatt taatagcttt ttcagatgat agtgtgcttt tatattatac caaacattga  300
```

tgaagtagtt gaaggatact ggttcttagt caattctcat aaaaattatc tcttaaaact 360  
 atgacattat tggagcacia taccaaaaac taatcaggtc tctgtaccat ggttcttaca 420  
 aatttaagat gagccttcta gaagccggag tcatattccc ttactttcct gcccaaagca 480  
 ccattcctgt ttctcccca aggttcagct acagggcaaa aaaaaaaaaat ntccggccnc 540  
 catgaacttg cttattaaaa atcccgttg gtaaaggtt 579

<210> 8868

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8868

gttgagcagc caaaaagtca tggtttatta tatctgaana aattcataa ttcaaacaca 60  
 accaaactgt acattttaca atcacattct atttgtaaac agttaaaagc cactgacttc 120  
 ttttgcattc taggacacaa acagttagaa tcaaggcaat gatatgatgg caaattctgt 180  
 actgttaaaa tttttaccct tgtttagtct ctcttctttg actaagcaag cattataata 240  
 ccatttgtgg gcaaaaaaag gggggaggaa anaaagttta aaatggtgta actcgttagt 300  
 ttgcaacaac atttaaaatt ttctttatac aacaaacaac tctgtaagcc caataccttg 360  
 gttacagtat gcatagttac tgatttcggc ttttaaggtaac aacagttaaa cattaacaca 420  
 gtcacgagag ancagaaaca tatggagcca cttgatggga ttacaaaaaa ttattaccta 480  
 ttgattatta acaaaccacn tcnctcncta ataaaaaaaa nantctgaa acnaaatnt 539

<210> 8869

<211> 511

<212> DNA

<213> Homo sapiens

<400> 8869

gggtgccttt ttgactgaan gcaagctcac agatgaagca gangactgaa gatctcgatc 60



tgaaccattt gccggtgtaa actcatgtct aaaatgcttg ttagaattga gacaggggtca 120  
 gtgtttacac acagcccttc attatatatta gagataaaac ctatttcttg ttcttgcatt 180  
 cacattaagt catgatgtaa gaatataccta ctiggttcct tcagagaatt ctigaaaagt 240  
 tcgatttaca gaagactgct atcatggatg ttctttaact cctcagancg gcggcagcgc 300  
 anggtggcgg gcgantaagc ccatctccca ncagcggcga cagcagcctc tttctgtaca 360  
 tctgcttgta cttccaacct gttaaaacag ttaccatgg cacttcctga cagactcccc 420  
 gttatactgg ctccagctaa tgccatgggtg ctgggcgttt cactcnagtt gtctccgant 480  
 gntccnattc catcnagttg nttccncttg g 511

<210> 8870

<211> 489

<212> DNA

<213> Homo sapiens

<400> 8870

atggaacaag aattcaattt attctctatt tataaaacat ttttttaaag tgccttgggt 60  
 atgaaaatct aaatgtctgc ggtgtgatca gtcaggagca cgtaactatc actcttcgca 120  
 tcctttgggtc actggganat cctttggggg ctgggaggtc cttctgtccc atgctaaagg 180  
 aaaagcttca caagggtann agccacanaa ccctcngcaa gaaaggccgg tcaggganaa 240  
 tgaatggtac anaaaggaaa ggaaggaaag ggggtggaac acaggtanaa ggcaaggaag 300  
 ggatgccgca ctggagaccg atggggacac tctaattgtg caagaaggag gaccttcctt 360  
 cttgaatgct gaacacagct agtctgaact tccttggaaa ntccanctgt ttgcccatgc 420  
 atanggccaa ctctccctgc aaagcaacaa atgtggcttc tatcnggaan gaaaantatc 480  
 catcantgt 489

<210> 8871

<211> 586

<212> DNA

<213> Homo sapiens

<400> 8871

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aacattcaga agtagagttt aattagctgc taattagcac aggaatcgtg gaacaggtaa   60
ctcaaaatth acattactta gaacaagaaa aaagtcagaa taatgcagtc ttcatttggtg  120
aagcttacia tcttctcaga ttagagtgtc cagatctggg aatattttct gttagaaata  180
cagaggaaga taaaagaact tgcagtagac catgccactg aagagtaaac agaaagcaca  240
gagaaagaat ttatagcttt aagtattttc ttcacaagta tatgaaattt atgaatgaga  300
tatggtataa tcataaatac ctgtgcaatg ttatcatgtt ctgactata aaatggctgt  360
gtattttcat tataagcaag caaaacatgt gacttcagcc tttctcaaga ttttagataa  420
actatattta agctcacatt aaataccata gctagtttta agatacccat ttcctttttt  480
ctaaataaat atgttggtca ggggtttttt gaaattcctg aagtnaaten cncccaagtt  540
ggtgagccat ttttatactt tataccnagg gtttaataata aataac                    586

```

<210> 8872

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8872

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ccaagacaga gtctcactct gtcacccagg ctggagtgtc gtggcacgat ctcagctcac   60
tgcaacttct gcctccagtg ttcaaagat tctcgtgcct tagcttcctg agtagctggg  120
actacaggca tgtaccacca ccccggttaa tttttgtatt tttagtagag acagggtttt  180
gccagtttg ccaggctggt ctggaacttg tgacctcagg tgatctgccc gccttggcct  240
cccaaagtgc tgggattaca ggcgtgagcc accatgcctg gcccaaagga aattcttata  300
ggcacagtta ttgacctaa ggtcttaaaa ttatcttgct taggtgcaa ccagaaggaa  360
actaaggcta aaaccaaatt acaaattcaa attccatgat tcaaatttaa aataggagat  420
agccatccaa atgagatgag agaattgatt ctgagagcgg gagagactca tacccttcac  480
atctgggaac tgccangccc anaaganggc ctanctgnac ccaggctttg gcctttccan  540
ggggattttt aa                    552

```

<210> 8873

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8873

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cagtagatca gcacttattt taattactga gatagagtca cacttgacag aagcaagccc 60
tgcggtatat ggcatcatca caccaccggt gggatatttta atcctaaaac tgagacagag 120
tttacttaaa catttaaggc ttgagtttcc tctgtacagt gtggaggtga ttaagaaaat 180
taatcctaac atgaagattt ttcattccagt taaaaaaaga aatactttaa aaacgacctg 240
cccttccaaa acatgaagtt aacttggagt ttttctgtga tatgacaaac taggcataat 300
cctatctcgg aattgttgag tagaaaattt atgtactaat actcctgtta aaattcaaca 360
gctttattgt gaaagaatcc agagatctca cactgaaaaa aatactaaca cagctcatat 420
ataaattact tatctataag gaacaattat agaaggaatc taaatggggc aattttaaca 480
aaccaggcaa aatatccent ttcctgaatn taagggactc caagnentgg agtttttagat 540
tnangn 546
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<210> 8874

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8874

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ggattttttt gtgctttaat gttcgcagtc acacgaaagt ggcatctcca tcagcactgg 60
ggcggccgcc tctcatcag ccgacagctg caggtcccc gcctctcacc catttggtct 120
gtttgcaagt tactagatca tacaaaaaat aaccgctaca aattctctgt atctggcata 180
taaaaactga gcaaaaagta tctcttaaag caaacatct cagaaaaaat acaacacagg 240
tttaacttct gcagtacttt gttcatataa aacactagta aaataggctt cttaaaaatt 300
```

aaatagtga ataccaacca aattatatac attgttacag tacaagtga tgaggcaaaa 360  
tatccagttc ttagtttccc aggtgggtgg ggggtggcctt cagtgcgtgg cacggagggg 420  
gtgacaggaa ggccacgttc cgatgtcaca gtcagcgcan aaagaagcctt tgcnacnggc 480  
naaccgnttg gaannac 497

<210> 8875

<211> 499

<212> DNA

<213> Homo sapiens

<400> 8875

cctcagtcag atttcacttt attgtatcg atgataatat taactcttca gatttataaa 60  
atgacaaaac ttgataatta cctggaaaca atttattatt aactaggtta accctaaatc 120  
catcaagaaa aaccacctaa catattcagt gttaaaaaga gacattacga ctagcctggc 180  
caatatggca aaaccctgtc tctactaaaa atacaaattt tagcagggtta tagtggtacg 240  
tgcctgtaag tcccagctac tcagaggcta aggcaccaga atcgcttgaa tctgggaggc 300  
agaggttcaa gcgattcccc cgcctcagcc tcccgagtag ctgggatcac aggcattgcaa 360  
caccacgctc ggctagtttt ttatatcttt agtagagatg ggggtttcac catgttggcc 420  
aggctggtct tgaactcctg cctcatgac cgntagcctn cgctnccaaa gtgctgggat 480  
tacngngtg gcccgttnn 499

<210> 8876

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8876

gacaaggctc cattctgtcg ctcatgctgg ggtgcagtgg cgcaatctca gttcactgca 60  
gaggttttta ataccatta gtgaaactag aagatcaggc tttagtctca gctggcccac 120

tgactttctg tatgaccctc aaccagcccc tgcccctctc tggtttccta tctataaaac 180  
 agtaggttta agccagctag gtaatgaggg ccagagaatc ccattaatcc cccaacacac 240  
 caggctgaga ggaaagagca gaaagttttc gtgttctggg ctgggggacc ttttgggagg 300  
 tctcactccc agcagctcca ctccctcgtc ctgctcctcc gagctctggg ccagggtcct 360  
 cttccgagcc ccagccatgg ganaggatct naggggtccc ctctggaagg gctggagcag 420  
 ntaaccnggg gtcactcccc cagcggggta ncaggagggg ctcaanggct tgaagtgaca 480  
 aggccatggn aacttcgaca cggggcccgg ggacagnccc caaaggtnnt gggnagncct 540  
 gggtact 548

<210> 8877

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8877

gagatttaaa accagattta aaaccatcag ctcccaggag tgtggcctcc tccacctgct 60  
 cccaacttt tctggttcca aaggttcaag ccaggctcaa ctcccactcc tctagtctcc 120  
 aaataagcgt agcacggaga gtctgagtga caatccactt taataatcca gcttcagctc 180  
 agctgagaac ttcccctctc aggtgcaaag ggatggcaga gaagtctttc caagagggct 240  
 caatccacta agagattatg gcttagagaa gggaacagct caaagaagcc cttgaagagg 300  
 gtgagggtct ggaggactcc tgtggtgcag gccatctccc ggatagagtg catggccagt 360  
 tgggggctgc ctaaattccag caccgccaa gccagccga gaaccnagat aggtccaatg 420  
 gtgggtncac anggggtgtc atttcngacc atgagatcct gcanggggga ccttgctttt 480  
 gtnggccctt tttggatcaa gggccttga ccccgngttt ggaagcttan cgtnccttgn 540  
 ctgt 544

<210> 8878

<211> 578

<212> DNA

<213> Homo sapiens

<400> 8878

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cctgggacag agtttcgctt tcgttgcca ggctggagt caatggcgcg atctcggtc 60
accccaacct ctgcctccc ggttcaagcg gttctcctgt ctcaggagag ttgtcttaa 120
ctacaattaa catcagttct gatatcagaa ttatctaagg acaccatctt atacctacct 180
ggtcattaac tgaaatttct ctctatagct tcatcattag acattaaaat tcctcatgct 240
taggctcagt gcatttacat ttcaaagaag acatcctatt tgcattacag aacaagcctt 300
gcacaatttg caagtgcac atctgttttc agatttcttt cctgnctaata attctgggtt 360
aacttagctg gaacatcttt gggtaanatg tgctgctggc anggaaacac aagctttttt 420
anggcaatgg ntctcaatt tttccaaaa actccagtat tgnactggca ncnnggataa 480
taaaatttct taaagggaat aatngccaaa aaaatatttt tcnnggatta cctggttaac 540
caaaaatgga tgatagggtt ttacnctgn ggcaatga 578
```

<210> 8879

<211> 573

<212> DNA

<213> Homo sapiens

<400> 8879

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gcatagaaca agattttggtt ttcagagttt tcttccttcc ccttccccca attgttagca 60
gcttgatgtg tcatttctcc cagcagggga gggggtggaa tggcttgggt tgtaaactcc 120
ctccccagc cttctgttcc ctggagggg cagttcagct gggttctggt tcagggtcag 180
gcaggcagtt aaggctggac ggggtgtgcc cgtaacaatg tgcctcatgg cctgcagctg 240
ctctgggttt gactccagac tccggtcgta cagcttgagt ttcacatctg agggcagcag 300
cgggacgtcc cgaggtgcc caggaaagag catgggccac agcagccagc cgccctgtca 360
gtccagggc acggtgcttg gactcgcaac ggctggcggt tgaaggtaaa gttcaccttg 420
aaaggtcaac ccatccacaa agcggntcan gangctcatg gaaaagctca acttgacacc 480
ggnccaattc accttgcccc aaaggcccct atttttgaan ggggncctcc gggggggnntt 540
```

cccaggacaa aanggccaac aagtgggtccc cct

573

<210> 8880

<211> 352

<212> DNA

<213> Homo sapiens

<400> 8880

ccatcacact gaacaagcat ttattccag ggattcccaa catgtgagca ggggtggaagc 60  
ctntgacaag gngggccana acctttgat ttggtttggg ggccaaaatc aactaaggct 120  
canagaacat acaaagcctg cgtgaagggtg gtgagctgct cccaccttca caggtnntggg 180  
ggtcctaaac ccttgagacc atggtcagtc ctgtgcccga gcctntnttt ttgcaggccc 240  
tgaaactttc actacagntc anacactgnt gcacgggccc gggagggaag ggggtgcttc 300  
cgggnaactg ttcacagccc cttaacttan cctccctggn gaccanggca ca 352

<210> 8881

<211> 453

<212> DNA

<213> Homo sapiens

<400> 8881

aataaacata agagtgggtt tattgattac atacaatttt agctatatta atatataatta 60  
taaactttta gaattagaaa taagtgactt ttatttttta accaagaata atctaagtta 120  
tggcagcatg ttcaatgaaa ggtaagtccg gcacaatttt tctatatctg tttctcagat 180  
aatcaggaac atcatccaag ctttacatta cgataccata atgaccctna gaacacaagt 240  
tccattaagt agaaatgaag catcatatgt tttctttttt aggaaagacc cccccttttg 300  
ttgtatagac atacccttaa taatcttact ctactgtaca aataactttt caccacaag 360  
agctgcctca agtaactttc attttggaag gctatcaagg cntgagacag agtancaaaa 420  
tgccactntg gactttgnat nttggngntt caa 453

<210> 8882

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8882

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aggttgaatg aatgatattat atgttccatg tttatgtaag cacttaactt ctttaaaaag   60
aaactagttc tttcaaaaag agctctgaat tctgtctctg gttagaaagt gtgaacaatt  120
ctcagaactt gggacatgat ttttcttctc tctcacttct tataagcaga tgcccccttt  180
cagggcattt tcaggttgca caggcagaac taagtgagaa atacggctcc agaggccatt  240
cagtttgtct ggggtccatat gattgtagga gttgggtgtg ttagaattgg tgaacttgac  300
tttaagaaaa tctcttactt tttcttcaac ttcctttagg cctagacttg ttccaagtgt  360
ctcttctcc aataagacag tcaggactaa ggctacatct ttgaaggccg cgttttcatg  420
gtcacaatat ttgtagaaga tcaaagtaga gcctgagctt ancactgaan ggtgcttatt  480
atgagctggg aaagttttga cctttngan gactggccaa anggatctat ttantggctn  540

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<210> 8883

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8883

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cttggaagc attcatttat tcacataaca taagccagac actatgccag gggctggcga   60
tacagaaatg agtaagacat gatccctggc cctcccatc cctggaatgt ctactaggaa  120
gaagctgcta gaaaaagaca acatgctact ttaaagccaa gaggggccag tctccattc  180
cagcttggtg cacactgaac acatttgagg cttatgactg gttcttttac ttacaaatat  240
tgtttagaca cattttcaaa tgtcacacca atcaataata ataaggaatg gattttatct  300
atattgacag ttctttcaac cttaagagtg aactgctaca ggtaagattc aatcacattt  360

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ttcaggagaa agctattgag accaatatgc tttggttata taataagggt gggaatgact 420  
 tataatggct atttactcca ggcaaagaga aaaatncaac agaacntagg atcttggatt 480  
 tcaacgtagt tctctccat gggcatttct ttggccgtta aggtcaatgc caactgggcc 540  
 cccagtgaac atgtcccccg gncctg 566

<210> 8884

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8884

gaagatcaca ggggctttta taataaaata aacataaaca acactcgaat ctctttataa 60  
 atcccagagc acaatgtgcg ttttcttact tccttttcat ggaccccaaa taaagacttt 120  
 gacagccaga tatccaagat ccggatcagc cagcttccta aaattctcct cttttttttt 180  
 aaggggtaga aaactggggg tatcccttgg tggttagggg ttgcttagag actgtggttag 240  
 agatttggtg ttaacaaaaa tgtattttga aagcaggatt tcaattttct tatattgaat 300  
 ggcaaagggt ccatgcacct ggctatcttc atttctgaaa tgaatgcttt cattttattc 360  
 tctccagcta ccttctccct ttctttcctt tccaccccca ttgcctcctt tcagtggctt 420  
 tctttttctc cttattcttt cactccttc tctctcacag caaaatgttc tggaggatgt 480  
 nantgntnaa acngntanct cc 502

<210> 8885

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8885

ggagttaaac tgtgctaaat tacagtagtg cttattagta actagatttc aaaaggttac 60  
 agaaaattta cattctctac acaaaaactg catctcctgc acagacaaca tcgacatcga 120

cacaggaagg aaactgattg tccattcttt gcccaggaag tctcggtact ttatagattc 180  
 gtctttacct cttttttgtt gttgttcttc cgaaaaagca gtttaaattt ttttcttttt 240  
 ctttttatgc tagggacgtg gagatgttaa aacgacaaca aaaaatatat ataaaaacag 300  
 gaatgaaatc tgtgagagaa tatttttggg tctaaagacg ggtgcattcc gtttgtcttc 360  
 gcccgaaatc cttgctggag accacacgag cagtgcatt gcacggagag gggcagcttt 420  
 tgggttccgc cgccgtcact gaaaccaccg gaaggcgggt cccgtcggaa gcatnacctt 480  
 ntcagaaca ncggaaggct tctttttggg ttcttcacat ttctgaattt gcaaactctga 540  
 tggccagctt tnnatccn 558

<210> 8886

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8886

gagacggagt ttactcttg ttgccaggc tggagtgcag tggccgtgat ctcggctcac 60  
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 actacaggtg cctgccacca ctcttggtta attttttgta ttttagtag agacgaagtt 180  
 tcactatatt ggccaggctg ctggtctcga actcctgacc tcgtgatctg cccgcctcgg 240  
 cctcccaaag tgctgggatt acaggcatga gccaccacgc ccagcccctg caagcagttt 300  
 ctttaactct gttgggatgc cattcgtggg caaagctaga tttgggaaa gttgccacgc 360  
 tctgctagga agagtcagtc ctccggggga aagtttcttt tcaccttcgg gatcccaagg 420  
 ctttctgggt tgactcaagg atttatcga ncttgatct ncangaaatn cctttgggcc 480  
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<210> 8887

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8887

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gcagattaga aaatitttaa tagttgattt gaaatgtatt cattcactca ttacattgng 60
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gtggagggtta ggagtagctg agcaatctgg tagagagcag catgtggcac acagagtga 180
caaactgaca gttggaactc ctgactttct ccattgcttc ctcagaagca aaatccttca 240
ccatgtgata taaagtagaa tgaaactcag tttcttcttt aagngcttca naaaatgcct 300
cactctcttc cttgatcttc agtctttgtg ctctgtcacc actaaacatt aaaaggggccc 360
aattaggatt ctcagtacat tcttcaataa ggggttccct taccttaa at accacttttg 420
nagaattacn tagtagggtc ccttggttcc anccaatgca aaagccgaac cttattnngg 480
ccatnttgnc gaaaagcctt tacttttacc caagggancc ttattgtttt 530
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<210> 8888

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8888

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ctgagacagg gtctcactcc atcactcgct ggagtgcagt ggctcactgc agcctcgacc 60
tcccagactc aagcaatcct cccgccttag cctcctgagc agctgggact atgagtgcac 120
gccagcacat ccagctaatt tttaaatttt aatgtagaga cgaggtctcg ctatgttacc 180
caggccagtc tgggactcct gggctcaagc aatcctcctg ctttggcctc ccgaagtgc 240
ggggtgacag gaattaacat ttttgattta acttttgttt tggcagattc caaactaaag 300
acaacatggt ctgacatcaa gaagtgccca ggccttccct acaggaaga attctgtgga 360
aactatgttc aaagaaaatc aagcctaaga gattacaggt ttcaacagac tggccttcac 420
ttctactagt tcaagaattg aatcctgtgg aaaaggacag ttiantgata tgggggaaat 480
ggaatncncc taaatggaaa agcctttntt ggaaaaaatt taaattntaa agtccaaatt 540
cn 542
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<210> 8889

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8889

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aataatcaca gggtaaaggg ggtatccatc ccctcaagca tttattcttt gtgttacaaa 120
caatgcaatt atgctcttta tttttaaatt gaggctggac acggtagctc acccatgtaa 180
ttccagcact ttgggtggct aaggcaagcg tattgcttgt gctcaggagt ttgagaccag 240
cctgggcaat gagacaaaac cccgtctcta caaaaaaata caaaaaaatt agcctgggtgt 300
ggtggcacac accccgcggn cccagctact cgggaaggct gangcaggag aatcacccga 360
accaggaag ccggangttg cagtgaacca agatcacgcc attgcattnc ancctgggca 420
acaagcgga aacttcatct taagaaccaa aaaaaatctt gcaaattctgc caatcgacaca 480
tgggtaccct atcttctctt ggttnataag gccctgggac ttcctttgga ata 533
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<210> 8890

<211> 382

<212> DNA

<213> Homo sapiens

<400> 8890

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aaatgatatt ttctttatit taaatccaga gaatgattta acttaagaaa aagttctaga 60
catgaaaaaa gaataaaata gttaagggat aagcagaaca caaggcaaaa aataacatca 120
aaacttcaat ggctaatatg aaggctctgt attaaaaaca aaacaacaaa aaacggtaaa 180
attttatcaa gagacataag taaaacgaca aacataacag tccctaaaca ggaagacaca 240
gtgctgttaa aatgacaatt atgtttcagt tatcaattga atgcaatttc aaacaaaaac 300
caagcttagt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt 360
tttttttttt ntntntnnnt nn 382
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<210> 8891

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8891

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gaggagagct tttctacttt attacaaaga gaagaagcct ttatgtggtc agaaaatata 60
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tctcagttca cttcttttaa gtcccatcac attcacttgg gtatggatgt ccttggctgc 180
tgaaaatctg gcccttttag tgcacagggc gacaaagtcc cctgaccagc agttccagaa 240
tgtcccattt tcatatattg catccatgca cacctcctaa aaatgaggta cagcagggca 300
aacattttcc aaaatagatg tcatatatat aatatataca cattccgtac atacatacct 360
ttattcatgt gatgtccaaa aatttaaaaa aaatgtccac gtttattaca aaatcgtagc 420
aagactggac aggtggtttg ctcatcttgg aaaggatgaa gctcaantaa taccctaaacc 480
ctgggaaaac catccagaga attgnnggca atatctttct ttttaaccag gcaggatatt 540
cttgcatata gt 552

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<210> 8892

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8892

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aactttatca tttataaagc catacaatgc attgcaaaga aacaaagcag ctgtacagga 60
gtggggacnc gtcagtgtac aatacattca tgtccaggat aaggngcata cncaggatt 120
tatacncggg ggcagcggct ataggcacga tgatacaaaa tataaagtat atttccatct 180
atataaatac ncagaaagcg tgtgttccac gtggttgggg gtggccgaca gtgtaggacg 240
tgtggcatta acagccccgg tgctgccgtg caggagagtct ttcttcttca ccttagcata 300

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caggctccca tntagnggcc cctgcgtgtg tcccaccacc tntccatgc cgtcatctcg 360  
 atgcccactg aagttgtcgt aggagtccca gcggatgaag ggggtcanna ggtgttatag 420  
 tccacaagac acgcttgggc ccgttttcca agngettcac gccttgaatt ttctttgggc 480  
 ccttaagaaa aatccaactt ccactttggc catacttttg gga 523

<210> 8893

<211> 471

<212> DNA

<213> Homo sapiens

<400> 8893

gtcgttttat tctataattt ttaattagt acgttaaaca tctttcctat cggccatttt 60  
 acatattttt tccttatgag ttgccttcac ttatcttcag caaaattatc tattgagata 120  
 tctttttttt cctgtaattt ggaagtgtc ttgatatgct gaaatgtctg cactgccaca 180  
 ttttgcccta ttgtttcttc agtttgcggt ttgcttgcag ttgtgcttat ggcgttcact 240  
 gtatggaagt gttgtttgtc catcaaaagc aaatctattg agtctttttt cttcatggct 300  
 cctgccttcg gtcataaact cttacaggta ctacaatgaa cactcgccac tgttggttacc 360  
 atggtgcaga tgtcttctgn atccttcag aaaaccattt gaggagtgc cttttgcaaa 420  
 atgtgccann tcttgncaaa gttttccagc tgccaggnaa aaaggtcctn a 471

<210> 8894

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8894

gagatgaagt ttactcttg ttgccaggc tgaagcacag tggcacgac tcactgcaac 60  
 ctccgcctcc caggttcaag tgattctccc gcttcagcct cctgagtagc tgggattaca 120  
 ggtgcacgcc accacgcccg gctaattttc gtagtttttag taaagacagg gtttcacat 180

gttgccagg ctggtcttga actcctgacc tcaggtgatc caccgcctt ggcctcccaa 240  
 agtgctggga ttacaggcgt gagccactgc acccggccca tggatcagag ttttaattaa 300  
 tcatttngt tttgaaaagc ccacagtaga gacctctagt tcagtaaaaa taacttgntt 360  
 tccttttagg attggtacca cagggaaca cagcttttca aagcgcctta cggggaagac 420  
 tgagcctgga atcttgacca atttgtnngg caaancctta aggaaccctg gcccaāncn 480  
 ccggcccttt naccggaggg cccatttcc ctggttanaa aantttcccc a 531

<210> 8895

<211> 419

<212> DNA

<213> Homo sapiens

<400> 8895

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 atccaggagc cacacaccct gcctgggctg tgagcactat tctcctgggtg acacggcgct 120  
 cagcccaggg gacctgggac aagagctgct ctgtcctgct tgggtggctct cagaggagag 180  
 ccttgggggc tctgagcagc aggtacaccg tcctcccctc ctgccagcct ggttctgccc 240  
 tctactggaag agtnaaccct gccagcagcg cccacagccc cagccccacg tccaggctgc 300  
 catgtcccgg cgggcagtgc ccaggcccag ttgtattttt tagcanactg gntgcactat 360  
 aaatagnngc angcctgtcc tacctgcatt ttgcaattnt tncgaacngg taatgctgg 419

<210> 8896

<211> 425

<212> DNA

<213> Homo sapiens

<400> 8896

ccctcctgaa caggcattta atagtcttat ttcagttgga agcaatagtt ggaaaataag 60  
 ttacaggaac agaccaaaaa aaaaaaatt aaagtgttc aggctgcaaa cgtaaacata 120

aggggcagga ggctacctgg ccctgtcccc aaccctgag acaggaaggt cactgtcagg 180  
 ggcccttagc catcaccacc ctctaattct agccctgcgg gagggaggga gggaatgtca 240  
 gaggtgggaa agaactcaac gggaatgagg aagagacttt gtaaactcag aaccagggta 300  
 aagggccggg gacaaggag ctctgggaac cttgccctg gcctaagggg tggggccagc 360  
 cccccccaca ggaacttngg ggaaatctgg tggnttannc ccagccatgc ccgnccactt 420  
 nanag 425

<210> 8897

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8897

gaaataattc aaaaacttta ttgacctata acctgattag aatatgccag atgggaatca 60  
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 attttgtcca tctgaaaaaa ttttctacat ccactgttaa tacggaatgc ttgacaatct 180  
 tgtcttttaa ccatcagagc acaattcaca gtatgaatac atttcagta aatctaacct 240  
 ccgcaaacca tgccagattt gttattttaa tatattcaac gttaaattct gtacatagag 300  
 taaaacctac atcaagcccc accacccaaa agaaaagaaa atgacagcaa tctggattca 360  
 ttttgcagtg attcaagttt tggccataaa ggatcattct attttaatgg ctcatcttta 420  
 aaaggcctaa agagaaattt gtgacangga gntactgnca ntaggatat tttctaacct 480  
 ttttttccca atggngnaaa ng 502

<210> 8898

<211> 352

<212> DNA

<213> Homo sapiens

<400> 8898



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 tttcaaagct gggatgaaaa gccaggtnnt ntgacttgca cntgtcaca ctggattttt 120  
 cctctgatcc agctgcagcc tcccataana agttcacnt taatttcag tcccatgctt 180  
 tgtcttggtc cctgtgagga aaggggtcag ctaaaggcaa ctgttctata aggatgggta 240  
 ggtatcctgg caagatattt cctntgaaat agtaaactg accttanaag ttactgtcta 300  
 gggcncntc agctgaataa agtctcccaa ggaaacnctg nggtanagca gt 352

<210> 8899

<211> 467

<212> DNA

<213> Homo sapiens

<400> 8899

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 aaaactgact agccagaggc cagaaaggac aaaaagaaga ctatctctgg cctgggtgcc 120  
 tgtgatctgg cgtgggtgtca caggaggtct ggggacagca gcaaagacct ggaccgggtg 180  
 aggtggatga gggaagcgat ctgccagccc ttccagcctc ccgcggctgg ggcctgagga 240  
 tcctgcctgc ctttgggggc cactggttgc ctggcctggc tggttccagg aatgaactgg 300  
 gagaggacag gaggtgcagg gctagagttg agaatgaaac tagggtgctg ttgcccccaa 360  
 aggtaccttc agtccctnta ccacatccan ttagaaagtc ttgacccttg gacaggcana 420  
 catggcctgg gacttaaagg ctgtangaag gtangcttgt antnaca 467

<210> 8900

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8900

gatttttaaa tgagaaaatt tataaaagaa agaaattcat ggtcacaaaa ttttaacatt 60

ttaatcctaa acattacagg gtaaatagat actggaccct atctccatac tccataaaat 120  
 cctaactttt agtttccatt tcaaatgttg ctgtaaccac taaaacacta gtggtttttac 180  
 aacctctgga ttatggaaat acacatttct gaaataaatg ctacaaaaac aacaatggaa 240  
 gaaagccaaa caaacagtct ccatgaagga aaaaaaagtg gaacattttg aagcttttag 300  
 acacttctct ttccatgtct tatgattaac ctgtcaattc agtgcattgt atggtcatat 360  
 gtaatgggcc ccatgggtgaa caaacatcta actagtgtcc attgattcca agttagtaga 420  
 tgatgaatct ttctggatac tttcaaaaga taccgcagc tcangggtag gactggactg 480  
 ggactggnat tcctcatcag tggactcttc tctgnttctg gnaagggtag ccatgctggt 540  
 accggnct 548

<210> 8901

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8901

caatgcatga atatttgatt ttatttcaaa agacaattat ttataacact gaccctctat 60  
 caaaaagaat atgcttttct gatggggaag tgacaaaaaa aaaaactaca cagaacaaga 120  
 gtaataaagt tctcaagtaa ggattgcact ccaataggaa ttgagtgaat ctctcagaga 180  
 gcactcatta catcttagac aacgtcactc ttctttcctc ttggccatat gttcaggtct 240  
 catagtcttt ctgaacacag aatggcagtg gccagcattg tccattatct atgttccgct 300  
 tgtttactaa ttaaaaagct ttgggtcttca gtgttgtaaa cgcaatttct gccttcgata 360  
 tcaaaagggtg agtgaatgag acaagattag ttgaaggaag tacttgatat tttactccag 420  
 atagctgaat gaaaatgggt attctccctt ggctttggag gccatcggtt cctactccca 480  
 ngnttttaca gaccgggaat taaaangtn acttgcaaat ttttacaagg ngg 533

<210> 8902

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8902

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gtcctgtact gccaggttgg aataatgacc aaagggaggg gcaaaacaaa cagatatgct 60
cactgtggca gaagtcactc caaagatcaa agacttgatt cagccgtggc tgccaaaatc 120
agaaccacag tgggtgctca tcagcacggt gccctcagaa ccacatgggc tacccttgat 180
aggttagcag cttgggggtgc aggccccgca tcttgcttag aaccacctgc tgagaactgg 240
atgtgcacat taccttacct actcacaaca ttigatttca actcaattct gctctagtat 300
tatgtttatt gaatgacgga agtctaacag acactgtaaa aatccaattt cacatcttat 360
agtacccaaa agggaactgt gattttccta tatcagtgag caaaatcttg agccaattag 420
taacaagatc acccaatttc tagtatttct attgagatat atttcttag gtttctgnaa 480
nggggaaata atttttggna ccttagtata agcaatctta tattcattta taggggtatc 540
tcaagt 546
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<210> 8903

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8903

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agtagagaca cggtttcacc gtgttagtca ggatgggtctc gatctcctga cctcgtgatc 60
cgctgcctc ggctcccaa agtgctggga ttacaggcgt gagccaccgc gcccggccag 120
ctttatcggt tttatcagct aagtttttaa aattgaaagt ccccccaaa ggggcagcat 180
atatgtaa atctatctgt acttccctca ctaatatatt aattatcttt 240
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tctatcttgt gcctttcttg tttttggtga tttttttaga aaaagatatt taaaatggtc 360
attatcaagt actgtgggct cctaagagg aggaagggan gtaattggna cccaatgggt 420
acnttanagt ggaaggggaa aaaagctggg ggaaagtggc ttggagacc ttcttcaca 480
nganggccct gtgggccaaa ccactaagct ngggtanaac ctgantcttg atccactggg 540
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nntgg

545

<210> 8904

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8904

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cttgagacgg agtcttgctc tgtcaccag gatggagtgc agtggcacga tgtcggctca 60
ctgcaagcta cgcctcctgg gttcatgcca ttctcctgcc tcagcctccg gagtagctgg 120
gactacaggc gcccgccacc gctcccggct aatTTTTTat atttttagta gagacggggt 180
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ggaataaaag agatggcaaa tcattgactt ggtgtggcct tagatagcat taattaatgn 420
ttatctcgac cgtttgtgga agctcctaataa gggtttataa aagatttgag gatggccaac 480
ttttaaatec atncncaaaa tctttgatac ctttntttt aagngggaan ggttnaattt 540
cctggcct 548

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<210> 8905

<211> 263

<212> DNA

<213> Homo sapiens

<400> 8905

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caggcatatt agctttaatg taggtggcca tgagttttta ggccaaggaa ggaataatgt 60
ntnatgtacc aaagcctttg gaccatttt ccatcatagc aatagaattc cctgttgcta 120
anccgatgat ncattaccct ttcccatag gtgtgagtgg cggctctgaat ggagaagttc 180
aatagttcng attgcagatc ctatgcanaa gaganaataa ggaaaataac cnnngnctcc 240

```

tggattaagc tgaggctggc aaa

263

<210> 8906

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8906

aagcactcaa tgtaggcatt ttaatcttct ggataacaga gtatcttttg agaaattaaa 60  
 atcgaattga ccatttgcaa tatttggttt tcctaataagg tactgtctta gtaaattgttt 120  
 aaatccaaac aaatcttctg ttcaccggga aaataactaat aaaaatacac tttctaaaaa 180  
 gaaattaaga aacactaggg aacacctaata gtaacagaaa gtagttcacg tttgttaata 240  
 aactgtattt ttaaatagtc ctttgttttt aaatttttaa aacgtgcaga taatgtcatt 300  
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 gttataatgc acacaagttt tataaggcct aatctaacaa gggcttggaa agtcttacct 420  
 cagtcagaat gacctttgat ggggttataa cgngtittgg tggtttgncc cctcgttca 480  
 nggataccat ancaccggtg atagtctcng nattggcagg ttttgggaaa an 532

<210> 8907

<211> 343

<212> DNA

<213> Homo sapiens

<400> 8907

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 ctgtacagtg gccacccatc tcaaacaatga attacaaagc aggattgggt gaactgggac 120  
 tttgtgcaga tcttgctgtg agggctcctg gatcaggctt gaggccacaa agctgaatcc 180  
 tctaaacagg tctcgatgaa caaccccctg ggaatggagg tagtccatgg tcttggtgat 240  
 ggtgcacagg gcgtnactgg ctctgcgctc cgagaagaat ctctgccgga ggatncggtc 300

caggagctnc ccancacgca tcagctncat taccaggncn caa

343

<210> 8908

<211> 429

<212> DNA

<213> Homo sapiens

<400> 8908

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tactgcagc ctccacctcc cagactcaag ggatactcct gcttcgcct cccaagtagc 120  
tggaacata ggtgcatgtc accatgcctg gctcgccctg caattctaag ccctctgtgg 180  
atggaggtgg gatgggcgca gatccacagc gaccatgaaa tgcccagctt gcaactcaca 240  
gtggaaggca ggcaactgcag ggacagctca cggggaagaa ctgacacact ttctgtgacc 300  
agtgccttg acatggcccg gagtcacatt ctaagggggg aggggggcac caaccttcan 360  
ggctttcanc accccaaccc caaaagggcc ctggangaag gcccgttatg gggggncccn 420  
gngaggnc 429

<210> 8909

<211> 490

<212> DNA

<213> Homo sapiens

<400> 8909

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acaccgcctt naccncnag cggccattag ggagggggct tatactnttc ctaatgtaga 120  
tctggccatc ttataaagca gaccacatta ttgtttcca tatatactg tagatatttc 180  
tctccctca aatatttata tctcgactaa aaaaaggagg tgcaaagagt atataaagat 240  
aaatgagatt ttcttgctgt tggtatagta caaacaccag atgactacca gtggagtaac 300  
anggcaaac aaaaacacaa accccacctt cagtgaggaa tggaaggtct gtttaccgac 360

ctcaagtagc tgaatcacct gctgtaactg ggacctnnct gacaatcatg gggttttag 420  
 ggacatgggc ccagtggatg ggctttctac ctngttccan aanggttat tngngncctt 480  
 acaccccttt 490

<210> 8910

<211> 457

<212> DNA

<213> Homo sapiens

<400> 8910

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 gcaacctcca ccacatgggt tcaagtatt cttgtgcctc agcctccaa gtatctggga 120  
 ttacaggtgc acaccacat gcatggctaa ttttgtatt ttagtagag atggggtttt 180  
 gccattttgc ccaggctggg cctgaactcc tgagctcaag caatccacct gctctggcct 240  
 cccaaaatgc tgggattata ggcatgagcc actgtgcccgc gcctgtgggc catttttgat 300  
 tgccccactc attcccaaag ggcgtgtac ccaggcaaaa tactcatata tgcaactaga 360  
 aatactgnct agagtttaca ctcatccta ttcaaaaaaa tttntttta agttcagntg 420  
 aaatcattca gggnttcggn ntggcttcta ganggtt 457

<210> 8911

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8911

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 caatgtgcct ggccagtttt taattttttt ttttttttga gccggagtct cgctctgtca 180  
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cgctattctc ctgccctcagc ctcccgagta gctaggacta caggtgcca ccaccacgcc 300  
 cggctaattt tttgtatttt tagtagagac agggtttcac tgtgttagcc aggatgggcc 360  
 ttgaactcct gacctcatgt gatctgccct accttggcct cccaaagtgc tgggattata 420  
 ggggtgagcc atcgngcccg gccccttttg attctttacn agaattattgc tgaagataac 480  
 ttttttccat gcccttaatt ttngtccctt gtgggcatat tcatttcttc ctgnaaaang 540  
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<210> 8912

<211> 486

<212> DNA

<213> Homo sapiens

<400> 8912

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 ctctgcctc agcctcctga gtagctaaga ctacagggtc catccaccac gcccaactaa 180  
 ttttttgtat tttttttttt ttagaagaga tagggtttcc ctatgtttac caggttggtc 240  
 tcgaactcct cacctcgtga tctgcccacc ttggcctccc aaagtgctgg gattacaggc 300  
 gcgagccact gcaactcgacc gccctgagct ttntttcctg caactagagg gtctgatctg 360  
 tctgcttggt aagaaactgc acaacttcca aaccatcagg gtaaggncgn gtgtgtcgtc 420  
 ttgagcattt ncntaaatng taaacatnac acgtaaagtt cacagnccaa attttcctgc 480  
 agcttt 486

<210> 8913

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8913



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 attggcacc c tgactctcaa actctcatct ccaccaacaa tgtcttactg tttgtaatca 180  
 ccaaaattat ctgttttttc cggggttgaa attgtagaaa gcactcaaaa ttaggatcat 240  
 atttcaatgt gtgtaggtga actaactgcc ccaaagacct acttaattaa actacatgcc 300  
 cttgtttttt aacaaagcat ctttaagtct cctggttggg ttaagtgaat ttgataacct 360  
 taaaaaagtc ctgtggattg ngtaattttt ttctccactg tagaagggtt aactatttca 420  
 ctttcacaga tgnactanat gnatcatgtt accctntaat aaaccattga aaccggatct 480  
 ggttcagaa nctggcnagt ancaactggg ctga 514

<210> 8914

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8914

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 tacaggcgcc tgccacctca cccggccaat tttttgtatt tttagtagag atgggttttc 180  
 accacattag ccaggatggt ctcaatctcc tgacctgtg atccgtccac ctcggcctcc 240  
 caaagtgtg ggattacagg cgtactgcgc ccgaccatt ttaaccattt ttaagtgtac 300  
 aatccagtgg gtatcagtta cattcataat ggctgggtaca accaacta ccatctattt 360  
 ccaaactttt tcatcatcca aatagaactt ngttcctatt aagaaattaa ctggccaatt 420  
 tnccaagcct ttggtaacct nttctttctg ggtincaatga accnggncta tgctaganat 480  
 ttcggggtaa atnggaatca caggattgg 509

<210> 8915

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8915

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aaagttatat tggctctttt ggttttggtc gcacttccat atgaatttca aatctgcttt 60
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ttttagcaat actgagactt ctgaccttta aacaaagtat atctctccga ttatttaggt 180
cttctttaat ttatttcagc aatgttttgt agtttttagt gtacaggtct tacacttatt 240
ttgtcagatt taccataag tatttcttcc ttttttttg agacagagtc tcagtttggt 300
ccccaggctg gagtacagt gttcaatctc agctccctgc aacctctgca tcccagggtc 360
aagtgattgt tgtgtctcag cctcccaagt agctgggatt ataggacag gccaccatgc 420
ccagctaatt ttttgattt ttagtagaag ccaaggnttt gcccggtgct caggaagggc 480
tcttaacctt ctttcttgag ggantnggca taccactccc tntggcaaaa ncctggtngt 540
n 541

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<210> 8916

<211> 169

<212> DNA

<213> Homo sapiens

<400> 8916

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cagaaaataa actgctttat tggaattaca ggagtgttgg tggccggtgg gcagagccta 60
gcaggggggtg cagccgcaa ggcccgggtg tcccagctgt tgctcaggag ccgtgggccc 120
tgcaggagta tggggaggat atgatgtgtg gggagcaggg ggnnnnnnn 169

```

<210> 8917

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8917

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aaattttaa gcttttatta acaatcttct tacattacaa ggataaatg acaaaaagaa 60
agtttctgcg tacatattat gataaaccaa catagctcta tttgtatcca gtgttctagg 120
tcccgtcaca caggtactat aaagcgtagt ctgcaaaata ataacatcaa gaggtttttt 180
ttaaagaaag tattaacata ttaatatgta tgtgataata gactcctagg tatttcccc 240
catccccact tatttttctt ttgtgattga catgaaaatg gttcagcagc gttgtcctga 300
gtacagccag cagcagctgc tgcgcggagc gggctgggcc aaagccctgc ttctggactg 360
gagtagccat tgaatttatg agtgtgcaga tatgtctctc ccaccgtttc ctgctagctg 420
atgccccctg ccctggccag aaagncttgt ggatggtggg cagcgtgcc tggcgatgct 480
catgctgncc acatcctttc tncgtacagn ggttgancag tgagggaagg cccgnacggt 540
tgcncctang 550

```

<210> 8918

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8918

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ctgtttttgg cacctttgtg gctgtgcaat ctgaagtctt gaattcattc atatatcat 60
ctaaaaacac tttaaaagtg ttgacccaaa ctctcactgg agattcaccc agtgaatcac 120
gctgctcaag cctcatcgtc ttttccagaa tctgttcaaa tagtgcatag aggtctttat 180
accgtatgct tttcccatca tccatcgcca atgcagatga ataaaagctg aagatattct 240
gccgaaattc cttcagggct tttttaata caacatccac tagtgtatcc ttcttgctgt 300
cttcattatc taggtcattc acctttttca gaagaaattc atccatgctt tttaaatcac 360
tgacacttgc tatgatctgg acagagtcac ttgccaatg catagaatcc aaagccacgt 420
tgctaattct cacacttcgc ttgcgcttan ccctttggaa aaggtcttgg nccctttgaa 480
ttccttccgg gaactgccgg caagtcttgg gcttnaaagg aggtgttggg gngatatgca 540
gctaatacatn n 551

```

<210> 8919

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8919

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aaattagcca agcgaggtgg ctcacacctg taatcccagc ttcctgggag tctgaggtgg   60
gaggttcact ggagcccaag agttcgagac tgcgctgagc tgtgatggtg ctactgcacc  120
ccagcctggg tgacagagtg agacccatt aaaaaaaaaa gaagaagaag aaagaaagaa  180
ctgtttatgg agcttgcaaa atcctcatct tcctacagga cacatacact atactcccca  240
cactcaaacc ctgactcttc catggctggg gctatcctga gtgacactat ttttctcaac  300
aatagaaaat agtttgatta tagtcctat ttcctgactc cggaggagct catccaactg  360
accaggtgg cagcctcagg tgttgcgctc accttctggg tagacatctg ctggacaccg  420
gaagggagtc naagctggca atcttgaagg ccacagtcta caacattttg ggtanaggtn  480
ctcangatt ttttaaaaat gggaatctga atgcctttta ggcagttttc ctttaagnccc  540
aacacttcta tac                                                         553

```

<210> 8920

<211> 379

<212> DNA

<213> Homo sapiens

<400> 8920

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ccgcggttaag gcctgtgctt tattgtgggt caatctcggg ggacgcggng gccagcaggg   60
gcgacgcccc actcttgggt cccagcagca cagtgagcag cagccgnncc accctgagcc  120
gccgnacaga aacagacacg cgccggcatg cggccaccgc cagcctnagg gccaggagcc  180
cccaaggcga ggagccaccc aggactcgcc tntgaaacgt ccttccagcc gtcgtcgacc  240
gtggtgtctc cacgtggcct ggccagtta gtccagctcg atggggctgc cgtcgnatgg  300
gctctcctcc caatcctcct gntctgagga gcccatgagg ctggtcanaa gggtcccgag  360

```

caggccccng tagnannac

379

<210> 8921

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8921

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cttttttttg agacagagac tctgtcgccc agtctggagt gcagtggcgg gatctcagct 60
cactgcaagc tccgcctacc gggctcaagc gattctcccg cctcagcctc ctgagtagct 120
gggattacag aggaaggagt cagtaaactt acaaagagat caatagaaat tatctaactt 180
gaaaaacagg agaaaagatt ttttaaaaaa atgaacaaag cttcagagag ctgtgaaaca 240
atatcaaaac atctatcact tttgtatttg aagtccaga aggggaatgg aaagatatta 300
gtacataaaa catttatattt gaagaaataa tggcagaaaa gttctctaata ttagtgaaag 360
atataaactt atgaaaatca aaaagtttgg ccaactccag atgggataaa ctcaaataca 420
atattttatg tatttatatg tgtaaaattc ctcaccagca gactttattt ctttttttga 480
ganggccnac tttggantgg gccccatga ggtnccccn cnaaccaag ggggcncctt 540
t 541

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<210> 8922

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8922

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gagacagagt tttgctcttg ttgcccaggc tggagtgcaa tggtgcaatc ttggctgacc 60
acaacctcca cctcccaggt tcaagcgatt ctctgcctc agcctcccaa gtagctggga 120
ttacaggcat gtgccgccac acccggttaa ttttgtattt ttgtttacca gagatggggt 180
ttctccatgt tggtaagct ggtctcaaac tcctgacctt aggtgatcca tccgcctcgg 240

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cctcccaaag tgctgggatt acaggcgtga gccaccacgc ccagccaaaa gcaagtttac 300  
 ctctacgttg aacagaagga gctagcagct ttggctgtgg aacacgggcc atgggaagg 360  
 ttttgtgggg agcactagga aggaagggt gagcagaaac agggcctctc acttctcctg 420  
 ggcaaagcgc tgcacttcct gggcgatcct gcgcacagcg gaacccccct gctncttctg 480  
 ggccaacacg ggcatnatng cctgggcnaa canggacctg tgcttcccgg ggacaccatt 540  
 ttgggaaatn 550

<210> 8923

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8923

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 gccttaagtt aaccaagcat ttgataaca cattcaaatt taatatataa aaatagatgt 180  
 atcctggaag atataatgaa gaacatgcca tgtgtacaaa ttcagaatac gctttttaca 240  
 caaagaacta caaaaagtta caaagacagc cttcaggaac cacacttagg aaaagtgagc 300  
 cgagcagcct tcacgcaaag cctccttcaa agaagtctca caaagactcc agaaccagcc 360  
 gagtccgtcc tcggggctcc gtgtctttca acacaccgtg gacaggggag gaaatgggtt 420  
 ctgcttgctg accaccagct tntgatgctg atgcgatatg tagccctttg ccgggccccat 480  
 gtntntcaag ttagcngaa tacactgaac ttgnnaatg ggccacgtct tcaactggnt 540  
 ggaacttnaa ggga 554

<210> 8924

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8924

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cttttttaaa cagtgattta ttgtgtttct taaggtaaaa caacaaaaac aaattctaaa 60
attgtaactt taaattaagt ggtaaaatt tcagatgaca gagccgataa ctggtaacag 120
cttcttgaag ttcattattaa gagtccaatt agaaacacta acaactacct ggcaatagtt 180
tgaaagaatc agaagggttc ggtgaagtga aaaaaaaatc cgaacatgca aaataccccc 240
caaaacacat gaccttcttt ttcattttat aatctaaact tgtaaaatat ttataaatac 300
atgatcattc tacacaatac agatcttcta gagcatttct aaaggatatt atagtttttg 360
gtcttaagga ataaagacta agatggaaaa ggagatgaaa acagtgaaat ctgaggaagc 420
aatacactct ntacacacaa gcaaactagt tcatccagtc aaggttagnc ggttcaggtc 480
agtncaatga tttaaggca cctaagaaat caggaccgga tntttcccct cctagagtta 540
caattntttc aaaagctcca angtttcctt aanggggggc g 581

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<210> 8925

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8925

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cagatatagg gtcttgctgt gttgcccggc tagagtgcag cggcacaaag ctcaccatgg 60
ccttcaactt cttggctcaa gagatcctcc tacctcagcc acctgggtaa aaagactaca 120
ggcatgtgct actatgcccg gctaattttt tgttattttt tgtagagaca gagtattgct 180
atattgcccc ggatgggtctt gaactcctgg cctcaagcaa tcctcccacc tttgcttccc 240
aaagtgtggt gattacaagc atggtgaggc ccagcatgaa cagaataaag aactcattta 300
atcagaataa acacaattat cctacttacc ttaatcacac tccaatatg gttctgttga 360
attaagagat ctgttagttc tgcagtgttc acagggagcc tttagaaaaa gctaaaagga 420
ggaaaaaatt attttaaaatt aagatcaaag catgattcta atacttcaaa tcctattttc 480
aaatccaanc atgaaattct gnggcttaag atgatgatct agaaaagcaa ccccagangg 540
aaagaaaagc cccggagagt caaat 565

```

<210> 8926

<211> 459

<212> DNA

<213> Homo sapiens

<400> 8926

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agctttgata catgcatata ttttaataatg aaacaattca tcaacagcaa aaagaaagtn   60
gaaaaattcg taagacctca gggctgtgga agagaatggg acatcaagga aaaaagatat   120
atntagcaac caaccanana ggctgcatga tgagtgaagc aaaggcaagt ttggctaana   180
tagtattata tgctctgaaa agagaatggc tggataggta cccacttatg tgactgctta   240
ctagcaggca gccttactgn atgcctcatg gaatggaggc aaaaagccag ggaaagggtg   300
gaggggagaa ggaagagaac tgtatnaaac ccagggtaaa caaatgagtg gggcagaatt   360
nccgagagag gactctaaag tcttttgntt ccttgaaagt ctaaaatnaa ccttaagggt   420
ttaactatgt cantcaaatt caatggacnc ntaatgngt                               459

```

<210> 8927

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8927

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ataaaacata aataatcatt tatactccat gattagcaat ggatcctgtc tgaagtaaac   60
aaggacaatt aatacagtac aagatatttg tggttttgtt tttataacc cactaagcca   120
agatttgat ctctgtatgg aactgatttt caaatggaca gaaatggtct ttgatctttc   180
tgaaccactt gtcttcaaatt tcttctgagg atacagtcac caaggcagtc agggctacgg   240
agccaacaca cttcacctct gggatgaactt catcttttat ttttctggg atatcttctc   300
ccataacctc agctatcaac agcaaagtgt cttctttgaa gctgaaccct ttcattttat   360
cttcaatttc ctgctgagtc ctttaagttcc tctccaaagc aaacgatgtt tgctgagggt   420
gggtaaactg aagcagaagc ctggttcgta taaaagaggc catgctttag ctgagtctct   480

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atcaacactg nttctctctt ttctgccata cagttttgga tatttgcaaa agcnttctna 540  
 ttttctggct atactgntat tcgctttcnn 570

<210> 8928

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8928

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 naacctctgc ctcccagggt caagcgattc tctgcctca gcctccagag tagcttctgt 120  
 aaggctataa accacagaga ttttcaagta ccactcagt ttcaggaagc tgaacattaa 180  
 ttacaagtgc ttcttgaaag tacaagggtg aggatcttcc tggaagtact attggtaga 240  
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 gcaatcaaga ataagtacaa taaaagtcca aaaaggcttc aaaatttcca tctggaggaa 360  
 gccaaagtgc ataaggagac tcaaactggg tcaggtacag agaatggtaa aagcagcatt 420  
 ctaaacctag ccaagagcca ttgctgtac actcagccgc aaaatgtgca tnaagactct 480  
 gtttggganc tanaaattgt ttcaggccag cccttttaaa aggtcccccga ggctantggc 540  
 attnttttgg cncctngctaa aaa 563

<210> 8929

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8929

gagggaaagg ggagtttatt tctgaggaaa ttcttaaggc acaaggaaaa agcaaggctt 60  
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 tatgtatgtg tatgccagca gtttatacta atatttttat ggcttagaat attatctcac 180

tttacagtga aggaggcata gtattcagga ttcacaataa cctaccaaag taaactgtcc 240  
aaggagtttg ttgtctccag ccattctctt ttcaccctga cacactttta tttccacttg 300  
cgtttgacca tcagcggcag tagagaatac ctagggaaga agaaaccctc ctgggttgtc 360  
aatgtgatta acctactcca tttctataga aaaaatgaaa gccaaagggt tacattccaa 420  
gactggaaga ctccataatt accgnatgtt cagaacaaan gctgatgtct ttataggga 480  
ttgaagtngg gattantacn gcaaatingc ctccattcc aactgnttca 530

<210> 8930

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8930

agcaaagcag ctgccactac agattgaatg catctgggcc atctgcgggt tactgggtta 60  
aggatttttg ataggaaggc ctcaagtgtt tcgggatacg cccttggtta cactgactac 120  
actgacaaca aagtgggtatt agagtgttac agggttacga agaatacctt taattatcaa 180  
ttatagggtt caaatttacc ttggctttta aaggaatagg gtatactgtt tttttcttaa 240  
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tggcttttcc ttgcctctgc caaccgctt atgctgctgg tctcttaact actggggcng 480  
ggaaaggggt ctaaaaacca nctggaactg nctatgangg naactggncg gggtgncttg 540  
gg 542

<210> 8931

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8931

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 ggtcatcccg ggaggaaggg agactacttc cagaagcagc agcacaaagg gctctgccga 180  
 gactntgcgg aggggggtcca ggggtactggg ggtggagggg tcccctcttg cagtgtgggg 240  
 ttactgtttg ggtaaagcga agtcccaggc agtttctgt gcacatttcc acatggcctg 300  
 catgaggcga gtgaaacca tgtctttggg cttttccagg cctctcatca gccgttgctt 360  
 catgatggaa acaaattcct tattgctcag ttgccattg ccatcacaag tcaaaagagt 420  
 gcaaacacca cattacacac cttggtctga aaactccact ttagcccttg tcctggccac 480  
 ctgntgcatg ggtcacnttt ntcaananat gctccancct ntggtaaaa cctcaa 536

<210> 8932

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8932

gagatggagt ctcactctgc tgcccaggct ggagtgcagt ggcgccatct cggctcactg 60  
 caacctccgc ctcctaggtt caagcgattc tcctgcctca gcctccccag tagctggggg 120  
 tacaggcatg cgctaccag cccggctaatt tttgtattt ttagtagagg tggggtttcg 180  
 ccatgttggc caggctggtc tcaaaccct gacctcaggt gatctacca cctcagcctc 240  
 tcaaagtgtc aggattacag gcatgagcca ccacgcctga cccactgtac gctttttaca 300  
 agcagcgtgc ttttctttt ctttttttta aagacagggt ctcactctgt caccaggct 360  
 ggagtgcagt ggcatgatca cggctcattg cagcctcaac ttcttggtct caagtgattc 420  
 tcctgcctca gcctcctgaa tagctgagac cacaggcatg ccccttcaca cctggctaaa 480  
 tttttaaatt ttgnanaaa tngagtctac tttaatgnnc aggttggct naaattcn 538

<210> 8933

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8933

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ccctcctggc cctggaaggg gccgaccccc aaccacctaac ccaggacaca gctggcacct   120
caggccccctt tccttctgaa aggagggtg tgtctctctc acattcacac atacacagac   180
acatgcatgt gtgcacactc atggcacatg ggacctcagg ggtagcctgt ttgccgatcc   240
ccccaagagg taccaggagg cagaccgcta gaaggagata agaggcaccc tgggtctcctc   300
caaccaagg aggaagaaag ctcaaccct ctaggatagg gactgtcttc agtcaatgga   360
gcgttgactt agggggcggt tttgaaggtt ttttttctc ctttttgcaa gtctttacaa   420
aaatagaact tctcttggtt ttataaatc tacggncatg gctctatgtg cattgtacag   480
gtagaaaagc catatggggc acttcctttg ggtgggtaag gccttgatgg cctgtnatca   540
gtcccttng gcttganaag tctttgcggc acctnaaat                               579
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<210> 8934

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8934

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aaatgggcaa agaacaatca tttattgggt tattttgtct ctactaaaca cattagtcac   60
ttatcattta aataccggac ttcattagaa gccgttgtaa cactttttct ccctcctgcc   120
ataaaaatac agtaagtaat ttgcttaaaa aaaacaacac aacactagga acaagtgttc   180
tggtttcttc tactgaact aaagacattt ctcagtgatt tcagtttgta aatcagtaag   240
acagtgcagg ctacaaatca gtgcaggctg aagactgaga ttcaaatgat cttccactta   300
aaagtgctga gctatggaac ctgctctctc tatacctctc catttcctaa catatataca   360
actgaaacca ctgatttata aactattaag tagtgctgaa ttctgtctgc tctattagtt   420
taaataaatg caacttacct ttagcattat attcagaaaa atacttactt aagcctcaan   480
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ggccccaata atttgagtc ctggactaga taccgccctt agacactttt ggcncagta 540  
anccttcctt tagcanggtt ccaaccctg 569

<210> 8935

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8935

gtgttataag atgtgtacac cttcatgggt tattgtgggt ttccttaagt ttatcctta 60  
ttaggatgaa gttcatgcat ttctacacta ctcttaacta aggctcaaga gacaataaaa 120  
acatagaagt aatTTTTTaa taaaaggaaa taaaataatc aagtactctg agtattttcc 180  
tccattctct tatccagaat tttaaggcct ctgaaaaata atgaaataat aaaaatagtg 240  
gttttgagat ctaaatttat taatatTTtg gattcctttt ctcagccaaa agctactatc 300  
tgaattaagc ttttcagttt aaaagcctgg aagaccatcc ttagaagaca ttaaaaaatt 360  
acttctgata cacacactcc taataattta gatagatatg aaaacaatct caaatnaaga 420  
tcaaaaaata aagtcctgt aaaaataacc tttggttgct cccaccaca ccgtcatatg 480  
gatgatttaa actgcaatca tgaaatttg aaaaaatngn ncgatcttat ctnttaaaac 540  
ccttcctcc aaacttgaac ctaaaanggt tcttgn 576

<210> 8936

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8936

gcaaaacaat cagaaaacat ttattatact gaaatgtgta catcctacta ttaaaaaaac 60  
aaagtaacaa atttgctggt gccaaaattt atttagcctg tttcactggg acgaactcac 120  
gttcaatgcc actcagtata atttcaagtc tgataagcat ctaagtattt ttaccccgct 180

tctaaaacct gatgaggaat tcaaaataag cacacagcat taaatgacat ttattgttcc 240  
 ataaatcttg agacccaaaa aggaatgcta aatagacaag caaaactttt aaaacaaacg 300  
 agataaactc acttctttcc ccagtgactg gtacagaaaa catgtgggtca cacgaaagca 360  
 aagggaaaaa gtcagaaagg aaaactctct gcctataggg atctatagga gttacagata 420  
 ttttcaaate gatgatgaaa aatagatcgt gcttctttgg agcaaataat taacccccctt 480  
 tatgaataaa ccntaaaaatg tcaaacttta ctactgaag tagttggctt ctggggagag 540  
 attcaactca aaattcccat tncatatttt gg 572

<210> 8937

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8937

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 atacttaaag aatcagactc ttgcaaacag tgacatcatt aaaaagagct tattttcatt 120  
 aacatgtgat taacaggaag gagatgattg gtgagttttc ttcgtaacca ggttcactgt 180  
 ggataggaag ggcctgcctt ccttcccacc atggagatcc taaaatcaca agctccagcc 240  
 tccatcaatg atgacagggt taccagttac ataagcagat tcatcagaag ccaaatacac 300  
 gcagagcatg gctattttct ctgcagttgc gaatcttccg tcttttgtct cttcaggaaa 360  
 tcattccgtg cctcttcagg atttctctg gcttgnattc tttctttagt agaatggcgt 420  
 atcaactgtt cctgggcaca cacagtttgc acctgatgcc ctgctgggat gaaatctgca 480  
 gccncagatt tgtgagggcc aatcacgnt gccttggttg ggctgtcaca cattgggtcca 540  
 actcctgagg gtggaggaaa ggtcaccaa 569

<210> 8938

<211> 578

<212> DNA

<213> Homo sapiens

<400> 8938

aagatgaaac agtgttcaact cacaaatctc ccagttgccg ttgtgttccc caggcttcac	60
agacagcctg gaaaaactcc tctagggctt gcagacttag ctggaaacta atcctgagca	120
ggaagcttgg cttgaaggga taagagggga ccctccaggt tggcaatcac gccgtttatt	180
cgcacttggc agcaagacaa tggatgatgt gggagggtgcc aggcccctgg gttggcacta	240
atttggagta tggttgagac agggctggag agaggcatct tagagggtggc ccccaaactc	300
gcaatcgga gaaaaaggca agaatcgact agagattgtc aggataaagg gaggcactgc	360
caccctgtct atgtctgtct gccccacag gggcttcttt aatacctggg gttccctggg	420
tgatgaatgg tcctcctacc cttggcaagg ggcctaccct gtcgccngg ccccataggc	480
aaccctgat gaaagagtnt catttccaag ggggcttttg gttctggggn ggnccacct	540
tgtcnggggt aaatggcnct gaaatgctta ctgagccn	578

<210> 8939

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8939

gtgtcatatc catagtntat tttaaaaaac tggntaaaaa ctaaccatac nggtttatta	60
atatacttaa aaagtntgtn ccctatgntg aagtaaaata cattagcaac atcttncgga	120
caccatcttt ataaaagtaa aacttctaga tcctgaaatg tactacagta gagtctatag	180
ttnacacttt taatcacaga ttggaattca ttctccttac tcccctactt cccacatgtg	240
gcagttatta cttcaaaatt aatgacattc actcatgtta tactaccaca gatccttaaa	300
tagagtacat actgcataat nactaacaga gccagtcttc tntatttggt gtcacatatt	360
ncatataagc atttgactta aagnacaaat agaaatacta catcccacaa ttgtaaacat	420
tcaccaggag cttccatagt acagtaagtn acagaggngg cccaagagtc agtcaagngg	480
tcttcactcc tggaaactgg tgaaatttgg aaaaccngtt tgnagggaaa tnttcnaag	539

<210> 8940

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8940

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ggaggtatgt cctgaacttc catactatta actagacaca gaactgcaca gcaggatgcc 60
tgctgtgtgc attccagata tagtacatag ctcagctctc aaatcagcaa caaagaagat 120
aagcacacca ggtccacata gcagagaact tcacattatc aagtttctat ccaaagcttc 180
aaagaagcaa ataatatattt gaaagactat gtgataaaag gatcaatttt tagaaagttt 240
catgatctgt catggatcaa tagtttataa aggacactga aacttggatg ttgaggcaat 300
gtcaaattgc cccaagtttc taaatgctta ctcttcattt ctgtacttaa tgtggacttg 360
gatcaaatag ggcatgaacc cacattggtc cntggactgg atttgacta gtattgggtt 420
aaagaagttg tcgttactcc tcgaggtagt ctcagatcta atttctcttg gattaattga 480
cactaatact tgaagcnctt tacttactac tngagaatct atctactggg tatgctttac 540
gncttagctt tatcaaattt taagnittgn taaaaccnc 579

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<210> 8941

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8941

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gcttcatgtg aaatttattc ctcaaaaaaa aatcattttt tctaaacgta actcaacatt 60
atagtaatta tgcaagattt tatgcagctt caagagttag ccaagagaaa agttgactct 120
tgcaagaaga tattttcaat gtctatgcag atcaggtagg taagagttaa gtgcggggga 180
gttggcatca tctaaaagac tgtagaaatt ggaccaaaaa tgtggagttc taaagcagta 240
tctccttatg gcatgccatt atttggagca acaaggttac ctactcgaat cactggatcc 300
tgagttgaca caaaacgcat ctgttgactc agggtttgta taaccacgtg cagtatttac 360

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taggctatcc aattctgggt ccgtacaact tctggggcct gcaaattatt ggagagttag 420  
 tgaagggcaa ccgaaaagat agcataaaag gccccgtntc gaaaggnaac tggcaacatg 480  
 cactccacgt ttttagaacc gattcaatng gccccgggtg aagccttaat ggaccattca 540  
 gaaantnacc ctttggacna ttggaaatnc ctttgcnat a 581

<210> 8942

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8942

cttttctttc tttttttttt ttttttgag acagaatctc actctgtcat cgaggctgga 60  
 gtgcagtggc atgatcttga ctactgcaa cctccacttc ccaggttcaa ggaattctcc 120  
 tgcctcagcc tccccaatag gtgggattac aggctcccg caccacacct agctaatttt 180  
 tttgaatttt cagtggagac agggtttcac catgttggcc atcctgggtc cgaactcctg 240  
 accccaagtg attcaccac cttggcctcc caaatgctg ggattacagg ctttgagcca 300  
 ttgtgcccaa ccacaagcac gtaagattct gaaggaggat ccaacattta catgaatttt 360  
 taagccagaa ttgggcttca agagattttg nccttcctga ggcttggcct ggctacttcc 420  
 ccagntacaa anaagtgggtg tgtgcctntg cctncacat taggagcagg gtttggaaac 480  
 ncccatggtg ncaagaa 497

<210> 8943

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8943

gaaaattcac agcattttat tcaagttaat caatttcatt caataatctg ccatattgtt 60  
 cccagcacca ctattactgn gtattatttc tctttgagga agaccaggta ttaagaaac 120

tggtttgaat ttccatgatg cctaactcta tggttaaaaa tccttttctt taccaaaaag 180  
 gaactttcta atcaccagag aaacagaggg aagactgaga tatgtttgca gaaatttatc 240  
 tctactagag acaattcata gttcataatc tttcagggtt gtgctttact tgggggctcc 300  
 gttttcggga gcggttgggt tcccataaat gtttgcttaa tacaataat ttgccccact 360  
 gtaccacaga aggggaaatg agggctagtg tccccagaaa gcaagcaggc agtcctncag 420  
 ggaagaagcc ctaatggctc ctaatgggtga cagagtcatt ctggctnccc agcctgtgag 480  
 ccaatattaa agtttaccta agtggacccg gagangnaat actagccnga taaccangg 540  
 cttanaactt taacngaaat gcctgggggtt tgaataatcn a 581

<210> 8944

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8944

aaagaaggaa ggggtttatt aggccggagg catcagcaag actcctgtct caagagccga 60  
 gccccgccc cgagttagca attcctgtcc cttttaagga ctgcaagtc taaggggggtg 120  
 tgcgtgagag ggtcgtgatc gattgagcaa gcaggaggta cgtgggtacg tgactggggg 180  
 ctgcacgcac cagtaattag attggaacaa aacaggaatg agattttcac aatgcttttc 240  
 tataaatgt ctgtaatcta tagataacat aaccgattag gtccgggatt gattttcaac 300  
 taccagtccc aggggtgtggc gcccgggctg tctgcttgtg gatttcattt ctgcctttta 360  
 agtttttact ttttctttct ttggaggcag aaattggcat aagacaatat gaaggggttg 420  
 tctcctcctt ttattcccc actttgagac tctnactcaa tancnnggag tngttcaagg 480  
 ttactacca tgtcttcttt gctagacaga tcaatagnga ttatatagna cccttgggct 540  
 gatgccattt gggcactaag ganccatnaa cttttatctt tgaanaa 587

<210> 8945

<211> 292

<212> DNA

<213> Homo sapiens

<400> 8945

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aaaataaatt cttttattga gatgagagac ggacacacac tgggagggtt ttgntttttg   60
ttgttgattt ttttgtgact gagtcccagt actcaggag gctcagactg gaggcggcgg   120
agcaggcagg cggcggcaag gctggcccc tggcgctggg gccgcgcata cttgaggaag   180
actgcggcgc gaccgggcgc gggacctcg agcgcagcgc ggcccatgca cggntcgagg   240
gtgcccagtt cctcggggct gcagnaggga natggnnaaa ctgatgcang nc           292

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<210> 8946

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8946

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cattaaaagt aaatttattg tttgtttaa aaaaacaaca actgtgcaat atgtgctgnt   60
caagacatgt tttgaatcgc tttgttggtc atctcttctc gggcttcagt ttggcaaggc   120
tgaacatgtc tccaagccc ttcagcattc cttcttggc tttcatttta tccttctcct   180
tatctctatc tttcttcttt tcttttccag ttttatectt ttttctatca gtcttatac   240
ctttctcttg gtttccattc attngnctct ccagagagtg ggaaggctga tcaactggctg   300
tggatacaga ctctctccct gatcttgaac tttcttctgn gtcttcttcc aaggtctcca   360
tgccttcac atcatcatct accgcgggtt tatcataaga tttgtcgatg gcagctctga   420
agctctcatt gcatccctcg cctctgatta tccgcggccg tggaccatgg aaanggaata   480
tnccattca aagncctcg gnaactgggg gctggagact tttcaaaggg ctngcttttt   540
anaccnggg agggcccat tttt                                           564

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<210> 8947

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8947

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gcaagtgggt tctttagctc tacaaatfff taatatatat tataatacag ttaattgaca 60
attacagagc tgcatttctt ggctgggatt taacaagttt aaacaaggta atgaaatgaa 120
gaaaaaaaaa gtctaaatca acttactcta tatgcaatag ctcttcccaa gtattacgaa 180
actagaaagc atcattcatt cccaatccat tgcactaatc catcaatttc tcaatcatca 240
ctcattctta acactcacia tctttctctt cctgntagtc attcattaat ttaataaata 300
tftaatgagt cctcacaatg tgcagggcac aagtagaattn tggaaaacac cgtactgcca 360
aaatagggtca ctaaagtcac taaggnacac taaaggcggg gcgaaangtg gtgttggaga 420
cagttccaga gcttaatgct ttttgcttgn caagagtatt cttaatccnc agtaggatga 480
cccactggtc tttccagtga aaggftaatg gaaaatgnng caataagncc tnttttcctt 540
ttaacaatta gaatgttntt gaaaaaatan gngagactaa aggcccc 587

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<210> 8948

<211> 601

<212> DNA

<213> Homo sapiens

<400> 8948

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gagatggagt cttgctctgt tgcccaggct atagtgcagt ggcatgatct cggctcactg 60
caatctccgc ctcccagggt catgcaattc tctgcctca gcctcccaag tagctgggat 120
tataggcagg cgccactaca ccagataatt ttigtatitt tagtagagat ggggtttcac 180
catgttggcc aggctagtct cgaactcctg acctccagtg atctgcccc cttggcctcc 240
caaagtgctg ggattataga tgtgagccac cgtgccaga catcgacat atatcttaat 300
gaagcaaaaa actcaggggc aagaatagca agcatgatac cacagtaaga aagtaggtcg 360
tgtgtatagt cagatttgta caattactcc tcaaatggaa taggaaaatg aatggaaagg 420
aattgtatta aaatgatctg atcccaaacg tcttgctttt ctgggattaa ggtaatgggt 480
tacaccaaaa cgtctgggtct ctgcactatt ggatctttcc ccattggntt ctaaataatt 540

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gttgcncgg gactaaatct ctttcaatta atttaatcca aaggaattag gaaaacccaa 600  
t 601

<210> 8949

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8949

gaggcagagt cttgctctgt tgccccggct ggagtgcagt gacacgatct tggctcactg 60  
caacctccac ctcccgggtt caagcaattc tctgactca gcaccaagc agctaggatt 120  
acaggcatgc accagcacgc ccgactaatt tttgtathtt tagtagagac ggagttttgc 180  
catgttgggc aggctgggtt ctaactcccg acatctgggtg atctgtctgc ctgggcctcc 240  
caaagtgtg ggattacagg cgtgagccac cttgcccggc aagcagcctc tgatttcaac 300  
tcaagagaca gaagaggatc ccaaattcca agcaactccc aagatgcaaa tcaaaatatg 360  
gaaatgttaa acaaattgaa ggatttccca atagttacct gcaacaccta aaggcactgg 420  
tttccaaatg ggcaagaact ntgcaaaca tatgttggtt gctggtnaaa tcaaggccng 480  
gaccttttta ccggtttaac attttgntt ggnccitttg aatttggggg aaactttana 540  
ccccctgttt aacttangga ggcctnaaan t 571

<210> 8950

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8950

gagatggagt ctttctctgt cgggaagaaa gaaagaaaa gaaaagaaa gaaaaagaa 60  
aagaaagaga agggaggag ggaattagt accaaaaa aaatgacatg atcagtgttc 120  
ttttaatcac tcacacctga gaatcaaatt cattaacagt caacttgcgc agaccgtagc 180

aggtttcacc ccagccttag ggagtttatt tttaaagtca cggccttggtg catagttttt 240  
 cctcgaatat gtatttcaca agtccttccc acaccttccc tggtagagaga aagcaattaa 300  
 gactacacaa tggcatgact tacagaaagc aatttatgaa aggtagcctc actaatgttt 360  
 tgcttccagg cttttcgata ggggtgttctt cttgcctgga atgcttggtc ctcttcacac 420  
 ttcacttccc ttgcctaac taattgctct tctaagtggc tcatcgcatg gatctcatac 480  
 gtcttaaaaa ccttcattag ttcctaacac tggatcgga cctttcatgc ttccaaagc 540  
 atcctgcttt accctacacc agccccc 567

<210> 8951

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8951

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 acaaaaatac aaagctctgg tggatttttt tgtcttttgt cccccccacc accacttcta 120  
 cccaacagcc ccttgccagg gagcccttgg ctgaagcctg gacgctgtcc ctgagggtgac 180  
 cccagggctc aggagaaacg gtggtccagg tctctctggg ggctagcaga gtatgagtag 240  
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 aggatgaggg ccagcgagat ggtctggtgc cacttttcag aggacattag ggagtacagc 360  
 tgatagacaa tgacagcgcc ctccagcagc aggaggatgt tgaggatccg cangggtttg 420  
 ctgaaaaaga aatggaaacc ggaagtggga aacctcagaa gggatagccc cgttgtaatg 480  
 gnctacngct ttgtagaccg tcttgctggg cttnancaac acnccctggg gcacatgcat 540  
 tnttaancca cgggtgctgg aa 562

<210> 8952

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8952

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gctgtcacat catgtatgta ttttaatttat acaaataac accaaggag gaaaggtaga 60
tgggggagcg gggaagatac attatgattt gaatagtgtg ggtgattctg tccacgctct 120
acatttaatc gacatgatcc agtgtgagca gagatgggag aggtgaatcc actgtttctt 180
cgggcctgtc cacaatgtga gtatctctgt cctgaatgtg gtcctaatat ttcataaagt 240
gtatatcca aattaacata aacctgaaca gaagccaact acttcatctg gtgcittaacc 300
aaagaaactg ctacacaatg tttcaaacac aggagaaaac ctggttggtta catatgctgt 360
acagtatacc atacttaatt ataatttaac agcaaagtan aattttgacc acacaggact 420
tttgctttta gatagacttt agaatctaac ttttccccct tttaaagctg gactttactg 480
nntatcctct tncacaaacc tttccaaan ggatccttnt tttccacttn agggc 535

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<210> 8953

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8953

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gagacagagt ttcactcttg ttgcctaggc tggagtgcaa tggcatgac tcagctcact 60
gcaacctctg cctcccgggt tcaagtgatt ctctgcctc agcctcctta gtagctggga 120
ttacaggcag gcgccaccac gcccggttaa ttttgcgttt ttagtagaga tggggtttct 180
ccatgttggt cagtctggtc tcaaactcct gacctcaggn gatccgcca tcttggcctc 240
ccaaagtgtt gagattacag gcgtgagcca ccgtgcccgg cctagatttt tttttgctta 300
aagacagggt cttgctctgt tgccaaggct ggagtataag tggccaatc atagctacag 360
tagccttgac tatctgggct caagcaatcc tcctgcctta cctcccaggt agctgggact 420
ataggcatgc accaccaggc ccagctaant tttttttttt ttngggcgga atttnactnt 480
gnncccaggc tggaatgcan tggcccagct tag 513

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<210> 8954

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8954

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gagtttttaa atagtcaagc tctcactttt caaatgttgg caaatatttt taaaaattta 60
aatgtgcagg ccaaacaaga ggcacaggga aacaggcagg ccacggcctc tgcagccctg 120
ggaaacgctc tgagtgatgg tgtacaggct atgcagtggg gaaggaagaa ctcagcacag 180
cctccaagga caacttggca gtatctatgg aaattttaca ttcaatagcc ttcgacccag 240
caattccatg tctaggagtt gattcttttg aataatcact tgtgaacaaa acacaggtn 300
aagaatgttc cctgcagtca agtttcagct gggcncantg gtnacacct gtaatcccag 360
cactttggga ggccaaggca ggggcgatca cctgagggtca ggaattcaag accagcctgg 420
gcaacatggc anaactccgc ttactaaaa atccaaaaat taccttggnc ttggtggcnt 480
gncttgnaat cccggttagc cggaaggtnn aaccccanaa ttg 523

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<210> 8955

<211> 474

<212> DNA

<213> Homo sapiens

<400> 8955

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cctgtaactg tgtttaaatt ccttatagat gctagatatt agccccttgt cagatgcata 60
gtttgcaaaa attttctgtc atttggtaga ttgtctgcc tgttgtttat tttgctatga 120
aaaagctctt aaatccaatt tgtccatttt tgcttttgtt acaattgctt ttggtgtctt 180
catcatgaaa tctttgccag ttcctatgtc cagaatggta ttgcctaagt tatcttcagg 240
atttttataa ttttgggttt taactcttta aaccatctta attttgtnc atagtaaaag 300
gggtccagtt acgatcttct gcatatggcc aaccagttat cccagcacca tttattgaat 360
aggagacct ttccccattg cttggttttn gcaactttgt tgaanacaaa tggctggang 420
gtttgnggnc taatttttgg gctctctatt ctggcccact gncctgggg gncc 474

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<210> 8956

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8956

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gctttaaaaa attttgctat tgntataatt ttgatgcaat ggatcaaaat caagatacca   60
aaagaatatg ctcagcaagt ttcagaggtc aatatttcca tttaaaatta tattgaaaat  120
taaactagtt gaatcataat tattttatth agcaataaaa tagctacttc ttgaaaaat  180
tacttaaacc tataaacctc ttttaaaaat tgataaatgt tttatgatct tactttactt  240
ttttttcctt aagattctga gtcttgaaag tttatttcaa agaaaagaca atgcctgtgc  300
cacatatttg acttgggtga gtgactagaa actccaagag cgggataaac caaatttggc  360
tagctgaact gtataattht aaaatatttc cttttatctc ttattctggc tttacctgac  420
atgatggcag catgtgagca aggacaatth caacatggcc ctgaaaaagt cagtaagacc  480
aaccagttag ctthggncce cagcttttcc tcatctggaa ccccatcttg gccaataaaa  540
cctggacctt gatgggattt gaaaagccat n                                     571

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<210> 8957

<211> 507

<212> DNA

<213> Homo sapiens

<400> 8957

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atcaagatag ggthtcactg cattgcccac actgggtctca aactcctagc ctcaagcagt   60
cttcccacct tggcctccca agtgctagga ttgagtgtga gccactgcac ctgacctata  120
attctggtht tagcaataga cttacgtaag ttggttataa ataccatgag taatttaagt  180
gatagtaaga gaagtaggat agagactata tcaaggthtg agatccttht gtcatttgta  240
agtgatgatga ctgggcattc acacgtgtga gatgtgcctc cctcaaacct tgthtatgacg  300

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tcggcacttt acccatgaaa aaggggttga actgcagact ggaagaaata ggaagccaat 360  
 taaatagatc attgagaaga tcagtagttt gtgcctcttg taaccattta gcttgcttgg 420  
 aaattctttc tngcaagtc tntactttac ccgangngtc natgtaagt caacaggcct 480  
 gtgagctctg gcaaacttct tgnccan 507

<210> 8958

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8958

agtagagacg gggtttcacc cgtgttagcc aggatggtgt cgatctcctg gcctcgtgat 60  
 ccgcctgtct cggcctccca aagtgtggg attacaggcg tgagccaccg tgcctggcct 120  
 gtggtgttta tttttctatg ccaggcttat ttcacctaag ataatgcct ccagttgcat 180  
 tcatgttgcc acaaatagaca ggattttgtt ctttattata acttaatagt attccattat 240  
 atatgtatgt cacattttct ttatccattc atctgttgat ggacacttat gttgattcca 300  
 tatcttggtt attgtgaata gtgctgtaat aaacatgggg gtgcaggtaa ggctttgata 360  
 tattgatttt ctttcctttg gacatatatt gaaaaccata tgattaaaat caataaacac 420  
 aatgaaagca tttggcaaaa ttaaactgtc ttacatgaca aaagcctnta aaccaattta 480  
 agtngggaaa acatatgcct taaccacaaa angggcgtaa agacaaccct tcagcttaan 540  
 atcatnctgg acctggnaaa ngggaaaaat ggtnccttga aaat 584

<210> 8959

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8959

cagttgtatg ccaagtgttt aagctttact taaagtaaaa ttagagtatg aaacctattt 60

gacaatatat gaatacaaat ccataaacc tgaacaaag catatataaa tgctcttacc 120  
aatgcaaaaa cttccatctg ttagatacat aaagagcact tccttaaaag cgacatgtat 180  
tttatactga ccgctgtagt caattttaat caaaaactac acaaataattt tatttgtatt 240  
ttagagacgg ggttttgctc tgttgctcag gctggattcc aactcctgng ctttaagcgat 300  
cctcctgcct cagcctccca agtagctggg actacagatg cacaccactg tgcccagcta 360  
aatattttta tgngattggg ttcaacagtt tatacccaca gttttgatgt gaaactggca 420  
aacctatggg ctgacagcca cagcccatgt agagggatga ctntaagcnc acttaatttt 480  
gnttaaaaaa aaaaaatctn gaccctgnta aaggncaaat ctgaatggaa aatgggggga 540  
tttaatcntc catgggggac 560

<210> 8960

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8960

agagggtaaa acactccaat gccaatattt tttcaaaaag ggctctgtgt tatectatag 60  
tttgcctttt tttttttttt gtataattgt acaacctttg aaagttacat aagttgtgat 120  
gatctaatac tattaatagc cattcagaaa acactttccc tccctcccaa caaccatcca 180  
gggggaaata aaagtcctga aaagaggcca gttcaacatg gcctctaccc tggtagaaac 240  
aaaaagtga aagagaagaa aacagaaatc aactaagagg tgttgccagt gtctctcagg 300  
agtggggccc tggctgttgc ctgggggtcat gaaaggcaga gcctgcagca tgcagtatgg 360  
cagccgggag accttgcagc cacatcttcc taccceggca catncacatt ccaacttagg 420  
ngtcatggga atctttcanc anggtcttc ttcgntgntt ccgctttatg catctgggtc 480  
ttcaagtccc cnttggcata ct 502

<210> 8961

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8961

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gtatttttag tagagacggg gtttcacat gttggccagg atggcttcaa tctcctgacc 60
ttgtgatcca cccaactcag cctcccaaag tgctgggtatt acaggtgtga gccaccgtgc 120
ctggccagtc tctgtctgct ttgttaacta ctgaaggctt taaaacttaa aggagaatgt 180
aaactacaaa tgaccaata cttaaagctag ttaacggaag tactgatact ttttattctt 240
ttcagggacc gtttatctaa aaaatgttaa ggcttatgct ttcagatctc agtccaattt 300
ctagaaatta acaatgagtc cttttatagc acttaccttt ctcttcctgc cttccccacc 360
tncaccccaa acttgctttg ggtgttcttt aatctttcaa gggagtgata aatgtcacaa 420
actcttaaat aaanggtga aatggcaacc gtatgactgg ttgactggc tttnaagtag 480
tattagnctt ctanaatcta atctaaatct tagaaccgga aaccgangg aactcaatng 540
tccaaaggga agttnataat aattggattc ttcneg 576
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<210> 8962

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8962

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aaagnhtagc aaccctttta tggaatgttca atacaatacc cgtcatatc acttatacaa 60
actttctcag tacaattttg ttcacgatca tgataatgct gaatgacaga gtgaggaagt 120
gggattaaca aaaaagtaaa agcttcaga ccagccagag cttaaagtcaa attaaggctc 180
tgctcttgcc agccactcca accttaaaga agttatgtta ttatcatgga taaattttta 240
cacaagattg taaaaattaa acgttaagga taaaagccca caacacgtga ctgatattcc 300
tcaaatatta atttcactat ttgtgacccc taaataaatg catcttcag gtgttctgaa 360
cacctagggt atagctgctc agcatgtaag cccctatgat aacttgagcc ctttccctt 420
tccttccca gtggtgaang gagaatgaca ttccttntcc tggccactgg ctcaaagggtg 480
gcttatnggc tatgcacagn tcccccaata nttcctgggt ggagctcnn tttcaagggc 540
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naggccaa

548

<210> 8963

<211> 507

<212> DNA

<213> Homo sapiens

<400> 8963

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gatttaattc ttcagctaaa acagcgggaag aggngattta ttatatgggt ggtacacttc 60
gggccc aaat aaacnccaga aatagtcenn gaatgtcaca aggtccaggg cagaggactg 120
aaatttgtgg cgagctgcat ggaaccgttg gttgatccct acttggtacg atgactggta 180
gccagggtg ctagctgatg accccaataa acgcitagtg agtaccggcg aagagcaagg 240
agaggatggt agagaggagg aggcagtgtc gctgggagac agtgagctcc cactggaaga 300
gaggggactg ggcatgtgga ctggagtctc aatccccaca ggacaccac cattctccac 360
tggtttctct tgggccaatg ccacagattt ttcccggtga ggcaattggn ttctacatt 420
ggtgcctgca ntcaacttcc tggaggtttg gatctctngg tcacaatggc ccttgggttt 480
tgcattttan tnaaccngaa ttgcagg 507

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<210> 8964

<211> 292

<212> DNA

<213> Homo sapiens

<400> 8964

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cctgagcagt cggncccaac agtgggctta aaatactcag tccactatga tgtaancaga 60
catgctgnca tccaggcttt gttgntccat ttataangcn caggcagagt agattcacca 120
aattctaagg gtcctaggat tatcagaatg ataaangagc actagcttcc acttaaaagt 180
gaccagctgc attatccact aatgagagtt agcntgtcct ttcaaagcag atgttgncn 240
ctntctagtt atgaaagncc tanacggcac cttcttncaa tggaaggctg aa 292

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<210> 8965

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8965

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aagtgttaca aattttatta aaaattaaca tttcaagagg tcatacgtat acaaatcaaa   60
ctgcaaaaaa ttccaggcat aaaaactatt atctgggtta gtgtgccatc tttcttctcc  120
aaatgtcaaa atgtccacaa aaaaagtctt tagaaagtca aatccactgt ccatttgtgt  180
tgggtaagag acctatgtct tcattcactg catggaatcc atgttaaaag aaccctgtct  240
tggttgtata ttatcacagg actcttgtat taatccattt ttcctcaatt ccccatagta  300
gactgccatc ttgatttctc agtggttagg tccatttgaa actcttcaag ctgactgggt  360
gtaaagtgtt ccaccaatgt ctacttcatt ggatggggcc tttagaggat tcaagtttga  420
ggttcatatt ttigtatat aaaatactga ctttnccaaa gatttccttt atcctctagg  480
ataaaaactnc acggtctcag cttcaaaatg gcatacctca aatnaaagac ccattattgg  540
tcagaaccaa ccgnacccaa tttatttttn                                     570

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<210> 8966

<211> 464

<212> DNA

<213> Homo sapiens

<400> 8966

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gagaaccaga atgcttatat tttattagta tccaagactg gggagaggga tggggtggga   60
gagatcaaga attgggggagc agatggggagg cgctacctca ctcaggagac acgagttctt  120
atccaagttc aaggtgaaag aagtgagggc aggaagagaa atctccctgc tagcaacagc  180
gactcaggga gaaactctgg gcccatagct agctggaggc agggtgacat tgctcccacc  240
aatgggcat cttcttagct acacctttgt agctgtggtg ccaggcagaa gaaccacctg  300

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gaaactgagc taaggcaggt tccttcttcc aacagaagac acagctgggc agggactgtg 360  
cagactcaac agggccaggc cagctagtgg ccnagtcagn gttcatgtct ctcaccantg 420  
cctggagggt ccccaaccna ggaaagaact ggncantnct gccca 464

<210> 8967

<211> 440

<212> DNA

<213> Homo sapiens

<400> 8967

gagtaatgcc gactttatat cagcacaccc agtgcccccc cgttcccgtt ggcccaggct 60  
ccggagacca tgatggcacc cacagtggac ttcgcaaagg agcgtgggga ccccgaaggc 120  
caggccaccc ctcanatggg ggtcccatgc taaagcagac ggtgccggtg ccgcagggcg 180  
tntgagaccc acggtggagc ctgggcctgg cgtgcgggag gcggccacga cggcgccttt 240  
ctcccaggaa ctccgggagg gaccccagga ctnagcgcca gggcagcctt ggcaggtgca 300  
gtgaggcant gacttgtggg ggtagatgt gggcctgccc cacgtgggca gggatcagcc 360  
aggcatgggg gtncancggg atccnantgg ggcacannca ccatgttttc gnaccattac 420  
caaagcccca ttgttttaag 440

<210> 8968

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8968

cagttgacac ctgggtcagg tgctctatta aagagtcatt aaaatcatgt ggccagggaa 60  
caaatacagt cttcgaatgt gacgattcaa gcttcctcat tgctgaacat gtttaggcag 120  
gtacaggcat ccttaggtgt ccacgtatctt gggacatgta agtggagagg catgaacctg 180  
attcatttcc tgatccagtg atgctcccag cccaccccca aacagacaca gcgtagcccg 240

ggccagctct taaggagttc aggagtgaga agaggccctc agagatctga cagaacaagt 300  
 cttacgtagt ggccgtgtaa ccttcccaga aaaagggctn ttaacaattt cacctgggtn 360  
 ctgnacactt tggacagaag tcctttaggg ttccagactg gnttgctctt tggctgacct 420  
 tnaattccct ttccangact tcgaccantc ccctaaacce agagcatttt tttccctnat 480  
 nttttngggc ttgtcctggt taancctttg ttgggaggct gaactggnac ttttggggaa 540  
 cctgancctt taaaggangg gtttt 565

<210> 8969

<211> 357

<212> DNA

<213> Homo sapiens

<400> 8969

gctagcaggg gattgggcca gacaaccctt gaagccatgt ccctctcttt gattctatga 60  
 aatggcagca cagtcaccta cagacatntg accttaaaca ctggcccatn tgcaatgcca 120  
 cggctgagtt tcccaaccac aggtaaaggc cccacccaaa agccaaattc tttcagtcaa 180  
 agctcaaaaa tttcagccca gcaattggat ccctgtgaag gctacgtaat aagcatagac 240  
 aaaaacgtaa aatcaaaaga aaggtttgga aatgaaagtt taaatatggn aactgaagtc 300  
 caaccnatgg natnatntac ccccaccctt ttttcncat aaatnggatt caaaatg 357

<210> 8970

<211> 489

<212> DNA

<213> Homo sapiens

<400> 8970

gccattaagg gccttttatt cgtattcatc acatcggana tcattctctt ctaggaagct 60  
 tttaaaaaat ccccagggtg gattagggca ctccctctgg gtccctggca atttctcca 120  
 ggtagggat cccaaggggt cgctgccttc ctgggtctct ggccctggccc ttggggcaca 180



cagtcatnaa naantgctgg ggggaagtga gctctttatt tanacatagc tctgctgagt 240  
 ggaaagtggg caccagcccc attaatgctt gctggctggg ggcttccaag cacgccccac 300  
 tgccaaggct canctctgca gttcttgga gttattgcgac cgaaggcgca natgcaagct 360  
 gactcagcag gcacagtga nctcgccagg ctccactgag agtccacgta ctgnccaatc 420  
 atangcccca ccttgnccac gccaaccaan gcggaaccgc ggntgaagcc ggtttcctgn 480  
 nagccaaaa 489

<210> 8971

<211> 410

<212> DNA

<213> Homo sapiens

<400> 8971

gcacagattt cttttcttct ccaccttctt gatccttctt ggctttggaa gtcttggctt 60  
 gggcagagaa ggtaagggtta agtttggcga aaagttcatt gttctcaaag cggctctcct 120  
 tcacctttgt ccagaagcag tcctgggaga ggtcctcagc cacaagcttg gaccagtttg 180  
 gcctccggag ctgcacctct ggcttataaa gctttttggg ggtaaatcca aatggcagaa 240  
 ctggggctgc aggaactcca aatccaaatg ggggaggttg aggcataccc attccgggtg 300  
 gaggtggagg aatgccaggg cctccgggaa atggaggagg tggagggatt ccaggaccac 360  
 caggaagagg gggaggagga ggtggcnttc ctgcttntnc anncnangga 410

<210> 8972

<211> 386

<212> DNA

<213> Homo sapiens

<400> 8972

gaattctcag gaagaatgac aacacatcac aaaaacgggt ttctttttga gggctctcact 60  
 cctgtcacc agactggagt gcaatggcgc gctctcggct cattgcaacc tccgcctcct 120

gggttcaagc aattcctgtg cctcagcctc ccaagtcattg gggatcacag gcatatgcc 180  
ccacacctgg ctcatTTTTa tatttttagt agagataagg tttcgctacg ttggccaggc 240  
tgctctcaaa ctcttggtt caagtgatec acccctctca gcctcccaaa gtgctgggat 300  
tgcagagcca tcatgcccc cctaaaaaaa ccggtattaa atggaaagnc aagtttaa 360  
gttccngncn cnatggctna ngcctg 386

<210> 8973

<211> 496

<212> DNA

<213> Homo sapiens

<400> 8973

gagacagagt ctccgttgcc caggctggag tgcagtgtcc gtgatcttgg ctcaactgca 60  
acctccacct ctccaggttta agtgattctc atgcctcagc ctccctaagta gctgggacta 120  
caggcacgca ccaccacgct cggctaattt ttgtattttt agtagagaca ggttttcacc 180  
atgttggtcca ggctgggttc aaactcctgg cctcaagtga tccacctgcc tcggcctccc 240  
aaagtgtggt gattacaggc atgagccacc atgcctggcc tttcatccat ctttaaacia 300  
attcaatgac catctagaga cagatgtgac caaagtgtta caaatttcta tgcatTTTct 360  
atgaattgct ctgtgcagtt cacacatggg ttcatcacc ccgcaggctg tgaacttcct 420  
tatnctgnan gctgcaggnc ttaagnttca ncaactcncg aaccaaaga cttaaagggg 480  
gacttggtta aaataa 496

<210> 8974

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8974

gttgtcattg ctttattact catagtttcc aagcaatatt acatatataa aagtcatttt 60

aaaaacaacc aggtttgcta gaaaagtgtt ttttcttgga atcatggatt tctacaccat 120  
 tcatacctgg agtcctttat attaaatata ttattttacgc aggcactagg caaaattgaa 180  
 gaagttttga gttatctcct ccataacccc caccttccca cattcccaca aaaaaatccc 240  
 accctttccc tattatatgg gttattaaca ttaaaaacaa taggaaaata cacaggcatt 300  
 tcaatttgaa tcacttttcc ctatttttac atgtctggag atgttggctt ggttatgaat 360  
 tcaaaagttc tcccagagtt ctgatgatg attcatagag aaatctttca atgctatcct 420  
 cttccaaagt aatttccatg aatgncttta gttttctgtg aacagtggct gnaaccttcc 480  
 ttacttttgg cctttatggt acccgcttta taaccggat tatntgccc gcanncgga 540  
 gggcacaagg ccttaaaatc nttttnagcc cccatngcct ttn 583

<210> 8975

<211> 349

<212> DNA

<213> Homo sapiens

<400> 8975

cagttcagta tatgaaaatt catttattta gtgaaaccct acattaaagc gtcccaacac 60  
 aaagcagatt cgaacataac aactggtgat tggctcatct cacaggctca catcatcagt 120  
 gtgttaacta acatacaata ggactgtacc cttttacagg attgagtgtt ttggatccca 180  
 ctcacacact aaaaccctgc cataaagttg tatcaattag ggctgttcaa atgtgaaact 240  
 gtattggaaa atgggaaact ttatctcctt atatatgtat attttttgag atggcgtnn 300  
 gcnccttngc ccatgctgga ntgaagtggc nctatcctgg gtcactgna 349

<210> 8976

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8976

gagacggagt cttgctctgt tgcccagtgt ggagtgcagt ggtgccgtct cggctcactg 60  
cangctccac atcctgggct catgccattc tcctgcctca gcctcccaag tagctgggac 120  
tacaggcatc cactaccact cccggctaac tttttgtatt tttagtagag acgggggtgac 180  
cgtgttacc caggatgggtc cgatctcctg acctcgtgat ccacctgcct cggcctccca 240  
aagtactggg attacaggag tgagcaacag cgcccggcct cctttgccac ttttaattaa 300  
gttctagaca aaggactcac agactaccag attattttta gaatatttga ttataatcta 360  
gaaataggta tgttctgaaa aagtactact gatacagaaa aggtagtttt atagatggat 420  
ggatttaaat ttggagtatt atgagttggt tcagaagaat ttaagaaagg cagtctcaca 480  
aaacncacca aattttattg agggaaaaga ctttgcatga aattaatttt gaattttgnc 540  
cngccatttc attccactga ttt 563

<210> 8977

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8977

cccctagcat gtccttaagc attttctccc cagcttttca caatctttct tctaaggctg 60  
taatgtctta catccttaat aggcatgatt agatttctcc caaattttcc aaattaactt 120  
tctttcaatg taaccaaacc aaaaccatgg catacagtaa actaaaagg tagacaggag 180  
agaaagggtg ctgcaattac agaaaattta gaaatcagcc tttaccagtt acatctgaga 240  
caaggtaaac ttccaacac attggaatca tcagaagggc tttaaaaaat acaactgcc 300  
gccgggcatg gtggctcata cctgtaatcc tagcactttg ggaggccaag gcgggcagat 360  
tgcttgagct caggagtttg agaccagcct gggcaacaca gtgaaaccct gtctctacta 420  
aaaaatacaa aaaattagct gggcgcgga ntgtgtgcct gtagttncag ctactcgga 480  
agctnangca ggaaaattgc ttggancccg gaaggcaaag gttcaatgag cccaaatcgn 540  
nccatgga 548

<210> 8978

<211> 517

<212> DNA

<213> Homo sapiens

<400> 8978

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gnnagttgat gtccacttag aaagcaggtg ntgttacaaa aatggngtta attatataaa   60
tggnccttgc acagcatgtg ggttcataac aagctggcac ctctgccaaa aaatgaagtt  120
gcttaagtaa tgggtgcaga agtccataag caccctcgct cctggaacat taaccactct  180
gagatcctca ggggaaaggc agtctataaa tacgaagctt tacggttacc cttagttact  240
tcacttttca gagcataatg caatctgtcc caagtccecat gttttatttc tgtagtggat  300
tctgctgtcc tatattatat attgnatata atgcattatg ttgctctagt aatttttttg  360
aagatattgt tccactatta tttttacttg tcttgaaaaa tggaaatagg cggtaatgga  420
aaggaaggcc tgctggcaga atccttattt aatttgcaca gtagaaagtt gncttatgng  480
nctgctactg gtcanggatn ccaactcgtn gaagana                               517

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<210> 8979

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8979

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gagaggggag tctcgtctta ttgcttaggc tggaatgcag tgggtgccga tcttggttca   60
ctgcaacctc cacctcccgg gttcaagcaa ttctcctgct ttggcctcct gagtagctgg  120
gattacaggc acatgcacca accctggcta atttttctgt attttttagta gagacagggt  180
ttcaccatgt tggccaggct ggtctcgaac tcctgacctc aagtgatcca cccacctcag  240
cctcccaaag tgctgggatt acaggtgtga gccactgcac tggcctaaga ttttcatttt  300
aacagggaac tgttagaaca gaaaagaagc ttcccaagag gcactcattt taaaaataaa  360
ttatagctta aattattact atgtggatta tatcagcaaa ggcagaaaga attaatgttt  420
tcctcctttc atgaaccttg taaggctagt gttgagtggc ttacaaatgt catataatgg  480

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actgtaaate atctgccata ttgatcaate atgttaattt aaggttttct taacattaga 540  
gatttttaata ggggagnta aaat 564

<210> 8980

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8980

gataagagtc tcactctgtc gctagggctg gaacacagtg gtgtgatctt ggctcactgn 60  
aacctncgcc tnacgggttc aagcgattct cctgtctcan cctcccaagt agctgggatt 120  
caggtgcccc ccaccacgcc cagctaattg ttgtatTTTT agtagagacg gggtttcacc 180  
gtgaccgcc tcggcctccc aaagcgctgg gattacaggc gtgagccact gcgcccggcc 240  
aggatattct tttttgacca atattagtta atctaattgg cacagttagc attaattgtg 300  
caatgtacag tgcgcagtgg ttcatggaag agggaatttg gggatgtaa tgtaagtga 360  
cccttaagac tatcaaaaca caatccctta tgtctcctcc atctagatct tannaataat 420  
ttnattcatt tcatttctga attgggtct gacctgggtc ttaattgcgt cagataaaca 480  
tttccatggg gggaacccat aatnggtcct taactcangg aagaacctat tggtttgacc 540  
aaacatgtcc tttccaatac 560

<210> 8981

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8981

gagacggagt ctcactctgt cacacaggct ggagtgcagt ggcacgatct tggctcactg 60  
caaactccgc cttccaggtt cagccattc tctgcctca gcctcccaag tagctgggac 120  
tataggcacc tactaccacg cctggctaata tttttgtatt tttagtagag acggggtttc 180

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ttggccaggc tggctctaaa ctctgacct tangtgatct ggccacctta nccttccaaa 480  
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<210> 8982

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8982

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tatgtgagaa tgtttttcaa gaagtctaag aggaaagtga cttttaaaac tggaaatgnc 480  
ttgagtcatg gggtaaattg ttctttaatc ctattcacn catcttggtt ctttncctta 540  
aatttncnca aaatt 555

<210> 8983

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8983

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gcgcacggct	ccttctccct	gggaaggcag	ctccactggt	gaaaggccac	tgaccaagtc	180
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cctancaggg	ccgtctatac	cctggagagg	caggcctgac	ttcttcctta	gagcttgcac	480
naagaggagg	ctcanganaa	agagacttgc	atnaanaaca	cttcagncag	ccgatntcca	540
ctcagtattt	ctttt					555

<210> 8984

<211> 500

<212> DNA

<213> Homo sapiens

<400> 8984

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acacaaggcc	tctgtcccca	gggatgggag	agggcagagg	tggcggctgg	gtgagttgcc	180
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gggcggcggc	ctggaggagg	acggactcca	cagtcacaga	gccgtctggg	aggtgctgca	360
cacagtggtc	cttcaggacg	ctcttgaggt	ggctgtagac	gcgcaatgcc	gtctcctgct	420
ccttgctgtg	gtcatgcaag	tgcacgccgc	angtgaaacc	caactggtgc	ttnanncaga	480
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<210> 8985



<211> 537

<212> DNA

<213> Homo sapiens

<400> 8985

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caaagtgctg ggattacagg cgtgaggcac cgtgcccggc ataagcttta ttttcaccag 300
gtaaatactt aagtacaaat gatagaagg cgggggggtg agtaagacct aagggttaga 360
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aacatcatgt cagctttaag atgaaattaa accnagttaa nctagggcgt ntgnnttctaa 480
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<210> 8986

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8986

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cacatTTTTT tcctaaagta ccgagaacta acctatctt gtatttcttg cagcttccca 180
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cccagccaga atgtgatata caagggttta caaggaaaag tagaaatggg tgtagatgta 300
tgtgcttggt gtaagaaaaa ttacactta cagatgaaag atccatatat aatccagcca 360
cataccatgg aaaggaaaaa caagaagaat atgtaatagt gatggttgcc aaaacctatg 420
caccgtccag tccacaggca gtgttgatca tatcgagccc acagcagttg catacatggc 480

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antggagtga ccctaanggn tticctatct aaaaggggca tttaaaaaag gccttaccca 540  
aaacccng 548

<210> 8987

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8987

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gcggtttgct gtagtggtcc aacaggtaca agcaaacatt ttggctcagc taggcagtaa 180  
tcacttaaa ccacatcccg gggctacggc cgaccaacc acagctcctg tgggatcaaa 240  
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tttctagcaa tgaataccca cagccctcac ttcttttaaat atcaacagag aggntccttn 480  
caccaaggnt cattgntctc tcccagattg gnaaaaggna accnt 525

<210> 8988

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8988

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aggcaggcgt ggactcggga gccgagggtg gtcggatggc agcgtgagcg ccagtatcat 180  
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aaaccaaagt taaatatctc aacgagaagg gacacctcac gtcgctgaca gctcggcacg 300  
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 aaaatgcccc agggaaatgtg ggacnggacg ggccccanac aggtgganaa gnaagccggc 480  
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<210> 8989

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8989

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 aaattacact caggacccat aactcttctt cattataagc atatgtagtg attcattcat 180  
 gcaggttttt atatgtagat aggatttttt tttccttttc aagaattcca ttgtagccat 240  
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 gtttgctaaa agcttattta aaattcccaa ctgacataat gtgttttcaa taaggaggac 360  
 gctgccgtgt ccaataccct tcccctgtca ttgttcggta ccatactctc tggtttcctt 420  
 ctacatgggt cacttaagtt aagagggagg ccaagggaag ttcccgattt cangcagtgt 480  
 gtggcagggn tacctggcct aacaacctgg ctactcctnc tgggaccgtt ctcaaangng 540  
 gcataatg 548

<210> 8990

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8990

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 ccacaggcat gcccctccac acctggctaa tttttaaatt tttttagag atggagtctc 180  
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 cctgagtagc tggaccaag ggcgcttgcc accactccca gctaagtact tttcatatta 300  
 aaaaaaaga agaagaaaaa agaaaaaac caactccact tctaatttca caacagaaaa 360  
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 gaaacatgaa tctgtccaac actttttctt aattggctcc ttcccctaca gaacacttag 480  
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<210> 8991

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8991

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 ttcaggaaat aaatgacca caattacca gtgaattcca ttagtggtta agaataattg 180  
 caggtaactt cttcatgtaa ttaccatgaa attgagtata atttagagaa taaaatcagg 240  
 aacatactcc taattgcttt ttgatccat taagcatcat tctcaatctc tcactaaatg 300  
 cttgggtgcc tcaaactagt ttttgnttat aggctagatt ttaaaacact gntttattat 360  
 aactctgtta atgtatctct acatagcact tttaaggcag atgtgaagag atcaactgga 420  
 ataagctgcc aaccatttat atacnatata aatattttgg ccaagaatgc agntttacca 480  
 gcttaagcct gggctntaaa cccatcaacn tttctatgat aanccaggga cttttaaggg 540  
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<210> 8992

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8992

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ctgtaccact tttagcagca gatgaaagag tttcttttcc tgcaattgag acagcactgg 60
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ctcgagggct tggttggcct ttacttgaga ctgatttttt cactgaggcc acatgatctt 180
cagagattgc aagacgcctc aaaacatcag ccaaagccgc ctttagcaca gtgatttcat 240
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ttgcagcaga aatactatca tcgagactgc cggcgaaacc gtcgagttgc acacaagaaa 360
ttaagggact gttcctcatt atgacttaga aaaggcagca cctctctagt agactaagag 420
catgtctgga catccactgg tagtggttaag aaaacnggan tttttaaaga agcacaccat 480
tggaacttggc aaactgaagt tttcttaatt aaaaattttc attnccattt ggggtgaaang 540
gtttttaata gagtcnnttt ttttg 565

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<210> 8993

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8993

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gatttttctg tcctatcaat ttgtctgcct gatctgttag tccctgaatt tcaactgaagg 180
ctcgagtaag aatgagactt ttggaaacct tggaagaatg aagtaatccc aatgtgatct 240
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tccggcgata ataagcaaac gcttctgctt ctttctgtag tttgtcactc cagtaatcag 360
gcttcagttt tagaggaatt ggtggagcct ttcgactcct ttcagctgct ttttcatctg 420

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cagagatgtg agtacaggac ggctggttga atgactgtgt gtgggccgc tgtggncctc 480  
 angtaagta ccattaattt cctctggaga gctcttntac aggcttaatg nccacgggct 540  
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<210> 8994

<211> 500

<212> DNA

<213> Homo sapiens

<400> 8994

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 ggctcactgc aaccgccaca tcctgggttc aagcaattct tctgcctcag cctcccaagt 420  
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<210> 8995

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8995

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 gctctaggat aaatatggcc aactgaccac caatccattc caatctttaa ataccctgag 180

aattgattat ataatcttcc ctccaaatct gctcttcctc tatttaccta tcttggttgt 240  
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<210> 8996

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8996

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<210> 8997

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8997

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gaatacaggc	atgtgcccc	acgccagtt	aatttggaat	ttaggaaaa	aagggggttc	540
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<210> 8998

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8998

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atgcacgcaa	gaagcttgcc	ctgctggaac	tgctcctcca	ggagactgct	gattttggca	180
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<210> 8999

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8999

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tttctctnct gggaagacca gcgaacatnc cctgggttgg anggcctnca gctntttcaa  480
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<210> 9000

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9000

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aatcaggata aataacgatg acattttagt cctttaagtt cctattttta gcaaacataa  300
acagactgat cttagcttca gcaaagctta ggccaacat acttagggct tggacaatgc  360

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tcacaaaatg tttcctaaac aaaccagat cccttgtctt ccatgagtaa aggctgcaga 420  
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ggtttaatct tagggattaa aagatatggc ntggaagntt cacactggta tgaactcaag 540  
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<210> 9001

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9001

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cattcaagca aaggacaata tgagtaactt agagaaatag ccacattcaa tgcacttaat 180  
gaaatcctgt tttctttgga gttacatgag gcagcagtag tagctagtgt ctgatattgc 240  
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aatggctcac ttctgggata ttaaaaacta tgggaattct cttattaaag tccaaccatc 540  
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<210> 9002

<211> 561

<212> DNA

<213> Homo sapiens

<400> 9002

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 aatacctggg gttccctggg tgatgaatgt cctcctaccc tggcaagggg ccatacctgt 300  
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 gnaagtcacc agggggctcc ggaaggtcac ccctgacgtg gaaggcctga natcctgagg 480  
 cccattntg tgggggggca ctggtgccct ccttgggccg ggccaatggc taccctgggg 540  
 gtaggtggtg gcgtcacaaa a 561

<210> 9003

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9003

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 atgagatacg ggaggctggt gtggagggtc cgggtcactg gtgactcgcc aaaaaaaaaa 180  
 tatattgact atgaggcaag ggatacacca agacaacagc cttccatcac tgtttgcaca 240  
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 ggctatgcat tgcccaactc caccaatctt aggaatctcc atcatcttac catncattac 480  
 ccaagggatg ggagctggtt atctccatcc aacttaattt ctgntaataa tctctatctt 540  
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<210> 9004

<211> 538

<212> DNA

<213> Homo sapiens

<400> 9004

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aatgagtcag ggtctccctc tgtcaccac actggagtgc agtggtgtga tcacagttca   60
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tagctgggac cacaggcaca cttcaccatg cccagctttt taaaacatat tttttgtgaa  180
gatgcggtct cattatgttg gccaggctgg tctcaaactg ccggactcaa gtgattctcc  240
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tctcagctca ctgcaacctc cacctcctgg gttcaagcga ttctcctgcc tcagcatccc  420
cagtagctgg aattacaggc acacaccacc atgcccggnt attttctgga tttttaagta  480
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<210> 9005

<211> 553

<212> DNA

<213> Homo sapiens

<400> 9005

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ccagccagct gatccttttt tttaacctat ctatgctttt gcttgcatag ccacttaaca  180
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accttcaata cctttagttg tctccacac acgcgtgtgt gtgtgaaatc ttctacaata  420
tcttcccttt tttagaccat gttcactgtc aaaaangtgc ttttaagagca gtctttggct  480
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aggtcaggaa aca

553

<210> 9006

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9006

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ccacctgaat gccccggaag tctgacgggt aacctgtgca ggccctgggc aggcctgtgg	120
tccccaaggg ctgccggcag caaaggcacc acggaagctg caggggacag gggaggccgc	180
tgcttcttgc atttttgtct gaaaggtccc tgtggagtcg acgagggaat tctcactgaa	240
gcagctataa aagaaagcgg agggcacggc gcctccctga agcaccagca gctgttctgt	300
agacggttgt tgggccacac gcaaaggact tggttcctgt cccagctta gtggtccgtc	360
agaggaaagg tctcttcttg cctggctggc cacagcatgg ccgcctcttc catgacgggc	420
acctgtgtan gccagcctct ctctcctgcc gccctgctgg gacggaagcc cggacgtacc	480
tgcacaagcc acaagtgccg gtgcttggct taaacctttt gngagctcat ccttcttggg	540
cttcttcaaa atatccctga	560

<210> 9007

<211> 554

<212> DNA

<213> Homo sapiens

<400> 9007

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ggtttacacc tgcacatctt actggtgact tacgccttgg agacaaataa ggccaacgtg	180
tttcttttaa attttcttca tctgcttcca tgtctgcaa aatttttct cttttaatag	240

atgcatgtgg agatgcatga agatcaaatg gtttacacac tgtaagagt ttggagact 300  
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 atccgcaagc tgacctacaa ggcagaggag atgagttctg taaatgctcc tgggctctta 480  
 nctgnngcta aggttccata gaagtcttct tctttaactt ggcantggga gttgaacct 540  
 aagtagaatc gagg 554

<210> 9008

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9008

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 tcacagtttt acagtattca aaaatgacag acctgcctta aaaaacaaaa caaaaaccaa 180  
 aaaaggacta ttacacccaa aacataagaa aacaattaaa taaacaagtt tggcattttc 240  
 ataactttat agtataaaac agaattattaa atttattact ggcaaacgga cactgattta 300  
 tttcctttga aatgtgtccc atttaaacac actatacaag ttattatac aaaagatgga 360  
 tgatcatttt gatgaaagaa gtgcaccctg aaaatttttg ccagtttaga atatttagct 420  
 cttaaagggt aaaaaaaaaag ccttttcctt ttttaactg aaggctgaat tcagaatttt 480  
 tttggtggct catctgncaa gcctttctgg gttnaaaacc atngnggcta ttggccccc 540  
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<210> 9009

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9009

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aatgtcttca atttattatc tttccacag tacacatttt tcacaaaccg taaatccttt 60
gcagttattc aaagtgtgta aacaactgcc tgaatcccca tatcccccca cctcggetta 120
aggttgtgaa tgttttaagt ccttcaatca agtttcaact cttccacttg cataaggaat 180
caagagcctt ctctctttta attatgtgtg ttttatcata cagcctacaa tgcagtaaatt 240
cacagtgaat gccctgggga aaacaaaaca acatgatctt tacagcggga ctigaaactt 300
cacaatagta aatgcagttc aagaagcttc ccataataaa agcgcgggtt ttcatttcca 360
gaaatcaagt caattagaaa ccctaggttc tacttaaaaa cccattttga tctaaaagtg 420
aaaacagtcc cctatccata ggcatTTTT aaactctata cagtttact tgcagagatt 480
TTTTTTTTT ncagctngga aacagtnntg gcgaagggtt agcccgggat gccctggaaa 540
nctggtnatg gctcaaggat 560
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<210> 9010

<211> 487

<212> DNA

<213> Homo sapiens

<400> 9010

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aagcaacgca cttttattac cttacagtca aggggggtcag atgtctgagg nggggtccca 60
gaactaaaat ccaggtgttg gcagggttg ttcctcctgg aactccaggg gaaaaatcca 120
tcccttgcct tttctggcct ctggcggcac ttgcactcct tggctcctcg tcccttcttc 180
cgtcttttaa gccagcagcg tccccttggt ctgtctctga ccacggctgg gaaggagtct 240
ctgcttttgg gcacacgttg ctaatccagg ctaccctntc actgcagatc ttcaactcaa 300
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agggtcttga catcttgggg actttattct gcccaggaaa ggtggtatca agggagtctg 420
agcatntgaa ccttcccang ggactgaagg aaaggccttn agnggcctct tctcctcct 480
tannaan 487
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<210> 9011

<211> 541

<212> DNA

<213> Homo sapiens

<400> 9011

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acaaatacca aaagatttat thtagacaat ttgtttacac aattatacac attatgatac   60
acgtttgaaa cattaacaca cgtggagact gctaaatcat ttaatatattc ttttgcaaaa  120
agataatttc tttaggctgt gatacctgca ataaccaatc tgttctcatt tggatcagat  180
ctttctccct ctgtcctgga gatctcacag ttcactttgc tgaagcaatc tatccacttc  240
cctatcgacc ttgcttatag cagttcaggt atagactatt tgagccttat atactaaact  300
gttaagccag tgcgtgccct atgccctgct gagaatagat tccttctgta cttgcagccc  360
tcagatgctg aattgatcaa tcaatttttg agacggggtc tcctctggca ccagggctgg  420
aactggtgca ngtcctccag ttgcnngcaa aaggttggca gcagaggaga atggatgatn  480
ggcacttngg cttggtggca actgggcaac acgtcctnna tggagncccg gnattcctaa  540
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<210> 9012

<211> 537

<212> DNA

<213> Homo sapiens

<400> 9012

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gcttgttaca atctatacat tttatgtttt ttaaccactt caaagtaagt ttcagacacc   60
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ggatatccaa ggttttgttc catttctcaa ttctagtctg tgaaattgaa gtctgatgac  180
cactcttaag agggctgttc attaggggtgc gggctgggca ttatgagtgt gtttttcatg  240
agtcagtgga aggaggggct tgttgtgagc agtgcattgag aaaaacggct tggctttgct  300
tctttttcca gctctgtggc cttggtcagg ttaccgtctc ttcagtatcg taacttttac  360
gtctcactta cggcattcgg tggcatggat tgtacaggca gctggatttg ctctcttttt  420

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actctactgg tcctttctcca ttinggetcat gaaaatagnc tntccaagg ttttggcctg 480  
ggtttctntt gggccatgga ggatggcttn aggttgggan atcctggaag cggatnt 537

<210> 9013

<211> 520

<212> DNA

<213> Homo sapiens

<400> 9013

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agaaataaat atttatgtnc agacgaagaa tgatatgagt gagaacacat ttattgtcag 120  
agacaatatg tattcatctg ttctcacact gctatgaaga aatatctgan actgggtaat 180  
ttataaagaa aagaggctta attgattcac agttccacat agctgaggag acctcaggaa 240  
acttacaatc atggcaaaag gcaaaggaga agcaggcacc tttgtcagat cggggggtct 300  
gggtctagcc catgctgaag tatgaggga gtgggtggat gggcagaaag aacactcagg 360  
gggccttagg caggtgaata tggttttatt cagcagcagc tctcattaac aactttntca 420  
cactagctct ttatgctggc ttncctgnct aactgcttga gctagnngtt ccacatacag 480  
ntgnccagcc ggtttggcct gctttcgggc acagtnact 520

<210> 9014

<211> 578

<212> DNA

<213> Homo sapiens

<400> 9014

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atctgcagga agcactccaa gtcacactgt tagctttaca gacctgaata tacatattgc 180  
attaacagtg ggcacttatg tactcaagtg gtccagtggc tttggaatat atgtctactg 240

ggcatgtgga atagaaataa tgtgttaggt ttaaatacaat ggaaagggtg tcaaccatca 300  
 acaaaagcaa caattatgaa ttcataatcct aggcaaagaa agtaccacag ttgacacttg 360  
 gtgtcagaat actggagaca aagtatgtaa aacaatgcct gttgcagcac cacgtgctca 420  
 ctccaactcc cagtggacag tcccccaatg ccttanggtc actcgtgggc aaccaaattgc 480  
 aatcaagaag ctgatagct tanaataaaa ggctgtaaag ctgatataca gattaaggaa 540  
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<210> 9015

<211> 573

<212> DNA

<213> Homo sapiens

<400> 9015

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 ggtaatggcc agttggggag tgagggtagt gtgcacacac acaaaaccct agggaggtct 180  
 ctctgctttt aggcctgcttg tcttgtgcag gttgtcaaag tctgggacag acgtgcatgt 240  
 gctatgtgnn ggtacacaat agttcgagtc tgTTTTcgTT tacaatcct catcaaagag 300  
 ttcattgagag agggttactt atctctgttt cacagatgag taaaacgagg cttaaaggct 360  
 aagtgcattt cctatgtaaa aatgctggat ttcagccact gtgtgcagtc aggtgctggg 420  
 cctgggttcc gcaagtggac actggangcc ccttctcatt aatgtagcac agccacattg 480  
 agggcggtca ttttggcagg gtaaanatga aaaaagtccn anaagggcaa nggatatacct 540  
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<210> 9016

<211> 575

<212> DNA

<213> Homo sapiens

<400> 9016

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gaaattaaca aactaat ttt aaaaatcaac acctgactgg ggacctggtc atacaaactt 60
cctttagata cagttgagaa gaaaacatca cttttttatg aagccccctct cctgacaggg 120
gactggagga ggaacaccat tatgcattgt tatcagcgtg gtgtaatttg actgttgaca 180
aagtatccgt ggcagtgcga atgagcgcag ttagaagtgt ggcggattgt aatcaagaag 240
atgcttagct gtgcaacact gcatctcgag cagatttgaa tcaacattgc ctttaaggga 300
cacacacaca taccaaaaga aaaaaaatcc attaat tttt agagggaaaa ttagagtggc 360
acttgatgaa gtgaaatttg acatgcgtta attgggtgtc agctctccta attagagatt 420
ttcaaattct tttactgntg ncacatgaa tggcacattg cnttgctgga caaatnctaa 480
aattgcaaat tggcttggtc cggaagtttt acgtttgaag ataccctgga tccttaagcc 540
attccaaagg ngggccantg gaaancaana tactt 575

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<210> 9017

<211> 585

<212> DNA

<213> Homo sapiens

<400> 9017

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gcatcatcag agggtttttac tgaacttaca accgacttgc ccgctcagta tgcagttcag 60
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gtctaccaca ggcaaacagt tttctcccca tttttagta atgcgatttt cctattagca 180
aaaagaggtc accagccccct gtagacttaa gggactcaag tcacaggatg gggatttcct 240
cttaatat tttttttgt tgtttgaact cttgatgcaa cattgtagag cagggtgttc 300
aggacctgct gtgcccgaagg gactgataaa ggaaaaagct ctatttattc tttttgtgat 360
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tcctagcttt caacgcttnc gtaagcagac gacatcttca gtttctagct cttgnagnnt 480
caacactgca catcaatgat gcatatgtcc agaatcagta ccaagacat tcgaatcttt 540
tcncttagtt aaccaatttt cacggntntt gggcccaaag ntttt 585

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<210> 9018

<211> 570

<212> DNA

<213> Homo sapiens

<400> 9018

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ggagatggag tcttgtccg ttgccagga tggagtgcag tggcgcaatc tcggctcact   60
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ctacaggcgc ccgccacat gccagctaa gttttgtat ttgtagtaga gacggggttt  180
cattgtgttg gccaggctgg tctcgaactc ctgacctcaa ctcatctgcc cgcctcggcc  240
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taacttaaat acgagcagcc acatgtggcc tctggttcct gccacggact cgggagcaac  360
ccctcctggg cgcggcttat ggccttctc tgtgtgctgc tggggttaag tttgcatgta  420
acctcttgag gacccacagt gtgcattcct aanggggtgcg gncttcggtt tccgtatgaa  480
tggaagaag tncacctgn tgattcttgg aaagagctgt gaaggatggg gtaaattctc  540
cttactgntt taaaaaattt nttgggangn                                570

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<210> 9019

<211> 576

<212> DNA

<213> Homo sapiens

<400> 9019

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aatttttata gcgtctttat ttggatctag ctctttcatc ttgtgtaact cttttaagta   60
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cagtctgaa attctacttt gatctactgc tctcatcttt gaaactgctc taaacactcc  180
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aatcctgtac ctttggtaac atctctcctg actggcagag taccagaca ctttaattaat  300
gctgatgaaa attaagattt aagcaaagaa gaaattgggtg taagaatgca agccttagga  360

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tctgaaactt gatgactgtg ggatctaact tctgcttctt ttgctacaag ctctgttttt 420  
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 ttgatttccc atcaaaagcc ctgtatgtgn actagnaatt aggacctacg anctggatat 540  
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<210> 9020

<211> 563

<212> DNA

<213> Homo sapiens

<400> 9020

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 tctgagatag ggtctctaag acccaggata caagggtgga atgtagctat atggactcga 180  
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 gttccatcaa agctgagcgg cagcttttga actcatttct cttagatgag ctgcatgtga 360  
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 ttgctgacag gttctttttc tgcacgggag cctntgnttg gcanaacntt tangggnaag 540  
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<210> 9021

<211> 579

<212> DNA

<213> Homo sapiens

<400> 9021

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atgcatgctg gctcaaaaat ggcagctctc atcactatca atacaaaaac ataaagcaag 120  
 acattctctg ccctttcttc ttgtttctgg atgtataaat gaatatttct ctatggagga 180  
 aaagtcatga acatgagggt aactccacga cacaaagtcc atggctgact tcccactcct 240  
 tagccagatg aaaggtcaca gcttagagga acgggtcttt atgtgcttat gacttggtgt 300  
 tggaaggagt tccctgacca tgggagagct cagctctgtg atgatttagc aaagcaattc 360  
 agaatgaaat ttggcctggn tatacactaa attaatgtac caaatccacc tacctttcta 420  
 gctaattgggg aattatgaag gttgccttgg aagaacaaat atttccaat agaattcacc 480  
 ggggtcccacc aaaacagtca agaatttga gttctggggg gttgcccatt ntcccgaatt 540  
 ggaancctac ttaactttat tgggggtctt aaagctnaa 579

<210> 9022

<211> 556

<212> DNA

<213> Homo sapiens

<400> 9022

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 gaacacataa catctagtag ggataatgat gaaagccaaa aatggattat ttgaaaataa 180  
 ttttggaagt aaaaaaacca taggtgtgag gaaaaagag agaaactaca aataaactgc 240  
 attgtgataa aacaataaag cacatagcta aaagcctatt aaggattttt taaaaattat 300  
 attttgagaa acacttggtg ctaataattt tctcaaaagt caaatatcca aaagtcatac 360  
 agaaaataaa acaacctact ttccatcaaa agtttctaata tttattctga gaaaagataa 420  
 cccaagaaaa caattttaac tccagaaaca atgggtagcg taaaattan taatcaaaag 480  
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<210> 9023

<211> 479

<212> DNA

<213> Homo sapiens

<400> 9023

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gtatttcagt agagacgggg tttcaccatg ttggccggga tggctttgat ctcctcacct   60
tgtgatccac ccaccttggc ctcccaaagt gctgggatta caggcgtgag ccaccgtgcc  120
cggccgcaac ttatatTTTT aaaataggct tttagatcag ttttaagggt tattttatag  180
ttaactagca gaaaatgtgg attaaaatta cagtaccata ctcaattaaa aatcatgcgc  240
tacataattt aagttctcct gttaacttct gtttgggttg aaccccgaag tacaataagt  300
gtagattctc attgtgacct acctgcccct tagggcattt tgcaaaaatt anccccTTTA  360
ccaattggaa aggcagggtc cangggcttt atggatttca tttaatctgg aanttttatc  420
ctattanacn ttgaaactgg gttaaatatg aatngnccaa tttagnaaa tattcatnt  479
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<210> 9024

<211> 551

<212> DNA

<213> Homo sapiens

<400> 9024

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agacaatgat ttgttaaaat tataaagcaa tcattcttttg gcctgcaaac agtcaacatt  180
agaactctcc accactgcgg atctggetcc ccatcacagt attattctga atccaggata  240
attacaatca catggcattt ttttctgcat gctttcttgg cccaaaccct gcatgacaac  300
atatacaatt tacaagatgg gacttgaaat tccattctc acacaggata gttagggcgt  360
gttaccaata ataaagaata aaagttatac aacattgatt attataaatt atattngntc  420
ttatccaccc ccattctcct taatatggta ctttctttcc tgcagaaaac atgatgggtc  480
tatntnccan tacatcatta atgatgatta gaatgagctg gtaaagacct tggatttgaa  540
aactgttttg g                                                    551
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<210> 9025

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9025

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gtttgctcat tcattcggtc atttatttac gtatagatag cttatgacac acagattttg   60
gcgtggctta ttgaaataaa atgaatgcaa actttaaaaa tttggggaac aagtttttaa  120
cattagaata taaaataagg atcaagagaa aacttagggc agagatacgc agccataagg  180
tcttaaatag cttttatagt tgaagcctca ttttgggtta aagcttctgg tagttaaagg  240
gaacaaaaag atagtgctgc agaaagtctt ggactgggaa cctggagatc agatttatta  300
ctgaccagtt ttgtgccttt tggcaaagca ctttatttct atgagccttg gtttcctcat  360
ctgngtaagc gatgggttat taaaagggat tcaatgggat atgggctcaa accttatnga  420
actccagaat ttggagnatc ttttatcctc antantagca catggttaag gggttttttt  480
gcaagncctg gaccaaagtt ttgggggttg cttcttccac cacaagcttg gggcttttgg  540
ccaaccnntt gacttntttg an                                           562
    
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<210> 9026

<211> 556

<212> DNA

<213> Homo sapiens

<400> 9026

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gtagagacag ggtttcacca tgttgcccag gctagtcttg aactcctggg ctcaagcaat   60
cctcccatct cagcctccca aagtgctggg attatagttg tgcggcctat gtgcaattct  120
gaaccagaca tgaacgctta aatcagaact agtattgcaa tagctgctaa tatttccaca  180
atgttataaa ttgcaaagtg ctttcccatc tcacttgatt aaaccaagct ccatgctaac  240
agcagcctcc tcccagggtt ctttgatttc atttttactg cagtccattc tcgacacaaa  300
    
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aaccaggggtg atcttttttaa aatgttgatc agatcatatc actctcttgc tcaaagtttt 360  
 ccagtagatt ccattcccac taagaaaaac atttaaattt ctgntggcct nttagaggtc 420  
 tttctacatt cttnctgcan gtgcttactg gcaacagtgg nctttcaatt nctagaacat 480  
 gccaacctt gggcttttca caagaacctt ggacctggcc agctttgctt gaacctttt 540  
 aatccttttt aaaggg 556

<210> 9027

<211> 394

<212> DNA

<213> Homo sapiens

<400> 9027

ccttattagc cactggcatt tatcatatat ttgagacact tccaattgat tgcacaagtc 60  
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 aggcacctgt agtcccagca actcaagaga ctgaggtgca aagatcactt aagctcagaa 180  
 gttccaggta gtgtgctatg actgcacctg tgggtggccac tgtactccag cctgggcaac 240  
 atagttagac cctgncnta aaataattaa aaattctgac tattttatta agaaaaaggg 300  
 ttanttctta actggtacca nggcccctat ggacctataa nttggcaccc tgntccactt 360  
 aattcttttt accctggctt tntaaggnc t ggan 394

<210> 9028

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9028

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 tccaaatggc tgtctggctc ctgtgccttc tttgtccca gtttggcca tttgtttctc 120  
 taggactgac ctgccctggc ccctggctct tgttttctgt tectccacat ctgacttctc 180

ttcattgtct cttgtcccaa agatggtctt acttctggga atgactcagg aaacaaaaat 240  
 ggtctccctc ctggccctt cttgccccag gggcagttct gggatttgag gagcaacagg 300  
 caccaggaaa ggggttgggg tgggtggtccg ggatgctgcc cctggagaag gtgaagcggc 360  
 ccgatgaacg cgttcatggt gtggagctcc gctcagcgcc gccagatggc gcagcagaac 420  
 cccaagatgc caacttcgag atctccaagc gcctgggccg cgcaatggaa ctgctggacn 480  
 aggacaaaa acgggccttc gtggangaag ncaaacggnt ccggcccaaa ctggggcgaa 540  
 tancccgact acaagaccgg 560

<210> 9029

<211> 558

<212> DNA

<213> Homo sapiens

<400> 9029

gaaatggaag tgtgtttaat aatttgaaac cacaggagag gtctgtcat ttattacagg 60  
 gccatgtttt agctcttctt ggatcgcttc agatctgcca ttcctctgga tatgaacctg 120  
 tggccgtggc agaaaccag aatcagtag gggcttggtg tgttcttggt tgatcttcac 180  
 gttaagatgc tattgagctt tttatccat ggatggtctt ccaacaactg catccctcac 240  
 agtggcctga gtggaattac cgatatgaga agaagcctgc tccaacacat atgcggcacc 300  
 aaaatcaata gctccgcca gctcacgata ttgaccagaa tacctgatgt agccccaggt 360  
 gaggagtgtt attaacagta gtccaacct acagttgaac aactggggct acaacctcaa 420  
 gacctatgaa gccagtgaag gcctgaggct atgtccaaag ctncatgcc cntgaacaag 480  
 acttcagggt gttcggaagg ngctgaaaac gtcttggtacc atgggcttga aaagtctcat 540  
 aaatncctgg attcccc 558

<210> 9030

<211> 551

<212> DNA

<213> Homo sapiens

<400> 9030

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gtgatctgca tgtgtgacac tgattctttg gaaataaaga gtggaagctg caggtgacac   60
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ctgaggagga ggggtcccatc tctctcctgt cggctttcac cgaggtcaca gccagacgtg  180
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gggcccagga gtccccagct cacaggccag ggcatcaggc caggcgcgct cgggtgcacac  300
cgcacctgtt tggttagttt tttacaaag acaggatctt gctgtgttgc ccaagctggt  360
cttgaactcc tggcctcaac aatcttcac cttgggcttc gaaaagtgtt gggaataactg  420
gcatgaacca ctngccccg nttgagctcc cggttttnaa cactgnacca atctngaaaa  480
actgaccttt ttctggccta caagttatct gaacttaatg ttaggaacaa aaaacnntn  540
tggaaccgt g                                                    551

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<210> 9031

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9031

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atctttggaa ttcatttcat taaggttttc aaaaaataca aagctcaaac gtaatcatct   60
atgtccacca caaaacagaa tcaaataagt ggtagcaca acaaacatag tgatcttttc  120
cattttaaaa aatataaata acaatgttca aggttttaca gttttcttag tgtgtgtctt  180
tttaaggctt tatgttgcag acccttcatt aatggtaact gtaccctgcc atcaggatac  240
actgcccacc agcaaggaag gccactgtgg atacattcct gagggggaca cacactgatc  300
catgttgcct cagcctgtta aaaactaaat gatcaaacac cctncaatca gttctcagtt  360
tcattaactt ctttctctca aagtantaat agaaaggggt ncgtgtccag cagcattcga  420
gctctcagaa gatcaatcag gaagggcann aaaggaaaaa ggcttcctcc tggaaaagaa  480
tttttttcct ttcancagga accaacccea nttaccena angttcaacc aggggttggg  540
cctgaaacat tttcaaataa aa                                                    562

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<210> 9032

<211> 531

<212> DNA

<213> Homo sapiens

<400> 9032

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gtagtttatg taaaaattta ttgaccaa atgtagaaaa agtgatacta ttacatatga 60
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cctgggtagt gtggtgctga ataaatagga atagggtggt ccctgggtctc tcctatagtt 180
tgaccaacag ttgacccaaa aggttatggt cttcagcgtt ttaattatat ccacgactag 240
atactgggggt ctgtattctt caaagtgtgg ggctgcctat tctcccagga accaaatggc 300
ctccgtctta agaaagtatg cttactagga aataccctgc ctaccttagg aataaatgct 360
acttaaggaa aaaataagag agctgaaaaa gctggtgcca ttgaaaaaa aaaagggaag 420
gaatgagatt taactgggct caaagcttnt ccgatncaaa atatttgggc atgnnttcat 480
aattgcttgc catttnccgc caaacggaan atggcattac caaanggact t 531

```

<210> 9033

<211> 507

<212> DNA

<213> Homo sapiens

<400> 9033

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gagacagagt tcttgctctg tcgcccaggc tggagtgcag gggngcaatc tcaactcact 60
gcaagctccg cctcctgggt tcacaccatt ctctgcctn aacctcccga gtagctggga 120
ctacaggcgc ctgccacctc gcctggctaa tttttatat ttttagtana nacggggttt 180
taccatgtta gccaggatgg tctcgatctc ctgacctcgn gatccacca cctnagcctc 240
ccaaagngct gggattacag gggtagacca ctgcgcctgg ccatgcctgg ccaattttta 300
tattttcagt aganacgggg ttttgccatg ttggccaggc tggtcgcaaa cttctgacct 360

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caggnaatcc tcctgcctna gcctccacac tgctgggatt acaggtatga gccccagtn 420  
ccggnccttga atccctctat ttcccccaa agaaaaatgc tgnnttacc nccaacagaa 480  
ccttcagga acattnaagn attgcat 507

<210> 9034

<211> 564

<212> DNA

<213> Homo sapiens

<400> 9034

ctatctgggc tttcttttga gctcttcttt gtttattacg tagcttcttt agctctttgt 60  
cagacatgtt tgctgtatca gcttcgtgtt ctttattctc atctgtaagg gggttgatcat 120  
gaagcttcaa atagatctct atagcaattc ttgctgcctt gaagtaaaat ggatgctgtc 180  
gaagtacatc ttctagtttt aataagtcca catatgatct aagggtaatc ttcctcatac 240  
agtatgtatg aaagtcaaac tggatcatcag tgatttctat aaaatgtctc tcaatctcgt 300  
gacatttctt aagtgttcca ccaaatttat tcattgcttt ataagcctgg gcacattctg 360  
tttggacca catgcactgc atttcattca aattctctac cgctgatgnt ccttccttg 420  
gaaactttga gcacatttct tcaagcttct ttaatcaagg tgggctttta accatgnatt 480  
ttgcacantt ggaggtggan aaaccggccg gtgggggncca aggnctgggc ctatcateca 540  
ccttgaggt tcttaanatt nccg 564

<210> 9035

<211> 570

<212> DNA

<213> Homo sapiens

<400> 9035

attaaattag ttgctttata aaacattgca gatgtcataa ttgttaacat aacaatttac 60  
caaactgtag ttaactggtg cagtttgctg agcatgtttt ataaaggaaa ggaaaggaaa 120

tgccaaaacc ctggtaaagt tgttcattg cagcctaaga gaacaaagat ttgtttctca 180  
gacacttaaa tcaggcaaata aaaaataagt ttccctcccc cacctgaagc agttcatcag 240  
tagaaatagc ctgataaata actagacagt ctttgcactc gagagattcc acaacatgta 300  
atgcaataat ggaaagggtt accttcttta gcttcaaagt tggagggtt tggtcatttt 360  
aattttatat caaactaagt gcttttcaag cccgcagtat cttcactctg agataagcag 420  
tcttcttcac aatgggattt ttaanatecc cangtccaat ttttagacca aagcantttt 480  
aatactaggg gcacacccca tgccctgntg gaaactgggt tttcttggcc aggttttgaa 540  
nnanttcaag ggggggttggg taangcttgt 570

<210> 9036

<211> 531

<212> DNA

<213> Homo sapiens

<400> 9036

actcttaact tcctggagat ctttaagaga ttctgttgaa gattcactgg gtattgaggt 60  
cccatcttta ttaatttctg caaactgtat ctcagggtgt gatttcacat ttatattgta 120  
ctccatgaga ggtggactta gttcttcttc ctcattctgt aactcttcta tttcaatacg 180  
ctgactgcct gttattgact gtagagcaat tccttgttga tagcaggata acatcctctg 240  
tatgatttct ggtactggta tgcctaggta gacagatagc tgatggtaat caaggagat 300  
attctcaatg ggattctcct tcactttgtc aatatactct tgcacatcc caaggcgcag 360  
aagaatatct gaaacttttt tccaaattga attgaactgt gactcagtga gaccattcat 420  
caaaatctca ctaaggaggg atatccctgn attttgcaca gtctcangaa gntgcanaa 480  
tttanaagat gtcnnaaaat ggcggtcca tattccatcc ttttttgggg c 531

<210> 9037

<211> 547

<212> DNA

<213> Homo sapiens

<400> 9037

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ctttatggca caggcactgg tgcattctgct ctctttgtcc agtcacactt gggatgctta	120
attttcctga tattatacat gcaaatacact tacttttcat agaatttacc attcatcaaa	180
tgactttcaa caataacaat ggtctgacat tctttcatgt cgtactgaga tttcagatat	240
ttattagaga aactataaga cagattttcc taatatTTTT gaagtatgag ttcctctgaa	300
tagttggtat aacatccatt aaaaaataga aaaggTTAAC tttttaccat gatcaaagct	360
agagttcaca atgaaacacc tgcatagctc tgcccaacat ctctgtaaca acagccaagg	420
gccggncttg aacatcatgc acagcaatag angnatcatc catggagtcg ancctgtggc	480
ttgccaaaaa tctggnaggn ntaaaacgcc tgaccactga attgggaagt aggaaactaa	540
ccaggtN	547

<210> 9038

<211> 567

<212> DNA

<213> Homo sapiens

<400> 9038

cttctcttgg ttttattggt tggtagaaaa acaggctctt taacactgaa taaacatctc	60
acgaactgtc gctcctagat tacaaaaagt caaaaccaat ttcctttgac gccggggccct	120
tgaatctgac attcaagtca ccgtaataga aaccagagct gctgaacctt acattctgga	180
aggtgcttga acaaaggcat gttaaggacc gtttaaaact tctagcatgt aagaagatcc	240
atctttcctt ccaacgcctt tggataataa cagcagaatc ccggagatct gctgctgagt	300
ttgagaaggc caagtttaag gattccaaac tccagccttc aatatttctg cagaaactta	360
gagaagtaac ctccccgtcc tctccgtggt cttccccaag tacagatgca ggatgcaggt	420
ctttcttcct gctacccagg caccgaggac tnaaccattt accgncttna tncTgggctt	480
tnttcaatgg gctcttggag gaaaaacttt tcggttttgc caactttaag cccttaaaaa	540
agccttttgg ttaaaaaang gcgggng	567

<210> 9039

<211> 573

<212> DNA

<213> Homo sapiens

<400> 9039

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ggatcttgct ctagtgtag cactcctgaa cttcacatat tctccttgc ccaaattgcaa 60
gggtttactc tcaagagact ctaggctcac tgcccataaa cctttgagtt ggaccaaattc 120
ttaacatccc tgtggatttg ctcatactgc cctgggcaga actctttcct tctttggaag 180
tctgaattac ttcataattg acatctattt tgaaattctg ttttacaggg tttaggatgg 240
gggtaggtag gcacaggaaa gagagtagag cattctctct tttctagcaa tttccattat 300
catgcccctt ctagctttta gaccagcagt tctgagacag ggattatttg cttttgtttg 360
ataggtcagg ttgtctggga tggtttgcca atagaaattc tatagactat tattgntcaa 420
agagcaagaa ttggcttaac tctcttcaact tataatgtgan gctctggcca tacttaacag 480
acaccccgtg ggactaacac agatatggtg ggcctgctgg gctctttcca atgggcccac 540
acaagncnca ggnntcaaan catggcnttt ttt 573

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<210> 9040

<211> 494

<212> DNA

<213> Homo sapiens

<400> 9040

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ggctgtgtga agttatcatc agtgcaaata gccgagacgg gaggggagtg gagatgggga 60
acagccgaga tcagcattca tgggcatcca cggtgccgag gtcacagaag gaactgaccc 120
gagagccgtc acagggcggc cttagggttag acttgaagga gaacttcag gtggcagctg 180
ctgaggccag gacggattga caggagacgc ctgggccacg tgcccaggct cacgcctgga 240
atcccagccg tctgggaggc tgaggcgggt ggatcacctg aggtcaggag tttgagacca 300

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gccggagcaa catggtgaaa ccccatctcc actaaaatca cagaaattag ccgggcatgg 360  
 tggcgggtgc ctataatccc acttattcgg aggctgangc aggagaatcg ctttgaaccc 420  
 nggangcgga actttgncgt gagcccaaat cgngccactg nacttcaacc tgggcaacac 480  
 agnaaaactt cctt 494

<210> 9041

<211> 582

<212> DNA

<213> Homo sapiens

<400> 9041

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 ccttttggct tccttggcac aatttatcag ttcttaacaa actaccataa atatccataa 120  
 ggggaaaatg aatttttagaa tatgaaagag aggttaataa atagccaaat atgtcaacca 180  
 ttgaaatgac caccaatttt aagattaagc ccgatttgca acttttattg aaataaatgt 240  
 catctactaa aaacaagggt aatttataac tggatctcaa cttgtttaat agcaattgaa 300  
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 ttacacttca aaaattctat caacttcaac aaataatgaa tgactgnata ttaatttaca 420  
 ttagtcctgt ggtctagagt acattttcca tttaaacatt tttaatagaa cttctgggat 480  
 ggcatggaca gcttctagtg ggnaatagga tatagtccgg tcttgntgga agacaccctn 540  
 gacaggatgg tggcnggaag ccngganaaa gcctgaatgg gn 582

<210> 9042

<211> 567

<212> DNA

<213> Homo sapiens

<400> 9042

gagatggagt ctcactctgt cgcctaggct ggagtgcagt cctgcaatct tggctcattg 60

caatttctgc ctcccgggtt caagtgattc tctgcctca cctcctgagt agctgggatt 120  
 ataggcatgt accaccatgc ctggctaatt tttgtatttt tagtagagac ggggtttcac 180  
 catgttggcc aggctgggtc cgaactcctg acctcaagt atccaccgc cttggcctcc 240  
 caaagtgcag gattacaggc atgagccaca gtgcctggac tcatttattg attcaatcat 300  
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 ctgctttatt ttgttgctca cactgtttca gcttcagcca ctgggaacat cttccctctg 420  
 catgcccac tcacatcact gnatgtataa agttctgnct tgctctctga ctctacaaga 480  
 tctcagctta tcttggatac tttctggcct aagtttataa tcagctattt ttcaaggaac 540  
 cctggttcgt ttaatggaaa anggggg 567

<210> 9043

<211> 556

<212> DNA

<213> Homo sapiens

<400> 9043

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 aagctagggg taaattattt ttaaaatatt ggaattcaca aaaagccatt caaagcataa 180  
 gatccagagc acagaaaaaa tgagtaatac atctgactac tacataagta ctaaaaacat 240  
 gtccatggca aaaaaaaaaa aaaaaaaccc acagaaaaac aacaacaaaa cagaaaaacc 300  
 accaacaacaa tgaaagtaag tgacaaatcg gagggaaatat ttgcaacata tttgacaaag 360  
 gactaatttc cttaatatat ggagttcaaa cagattaatg aacatgatca acaggctggg 420  
 tgcaatggnt taagcctgna atcccagccc tttgggaagc tgaggtgggg canatggctt 480  
 gggncaggga gttcaaaacc agcctgggca catggnaaaa tcccattttt caaaaaaat 540  
 tnaaaaaatcn cnnggg 556

<210> 9044

<211> 548

<212> DNA

<213> Homo sapiens

<400> 9044

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aaaaagacag agtctcactc tgttgctcag gctggagtgc agtggcgaga tctcagctca   60
ctgcaacctc tgcctcccag gttaagcaa ttctcctgcc ttagcctccc gagtagctgg  120
gattacaggc acccaccacc ataccggct aatttttgta ttttagtag agacagggtt  180
tcgccatgtt ggccaggctg gtcttgaact tctgacctca ggtgatccac ccgccttggc  240
ctcccaaagt gctgggatta caggcatgag tgagccactg tgcttggcct gattttcata  300
tattaaatga cctttgcagt cctgggataa atttacttg gtcattggtt ataattgttt  360
taatattgct ctggatttag tctgccagca tgttgctcag gattttcgtt cctgggccac  420
aattctagac acaccctggg ctggaaggga acccactggc ttgaaggaaa ggaccccatc  480
ttggctgnat tcatggctgg ttaactgaan aanccttngn ccctgaataa ccngcngaaa  540
tacctggg                                     548

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<210> 9045

<211> 566

<212> DNA

<213> Homo sapiens

<400> 9045

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gacattgttt ttctaaagtc ttttagtatg ttctacagt atcattctca agtcatataa   60
actattgct gtggtactaa gtatttaaat atagattgtc tatcaacact ttcttaactc  120
tagaatatgt ttagaaatat tcttcaacat agtatgatgt caatgcagaa atgagaaaag  180
aactaaggat ttacatcagg ttacaataca ttaatcaaaa aatacatttc tgtgcctcta  240
tgaattctta atattaattt ttgcaatttt acaaaatctt actaaaaatt ttggtatttc  300
tttcctata ttcttcaaca atggatataa gtattgtag tgcaaccagt taacagcaac  360
actctgacgt gtttcataaa aacctatact attttataaa aaatcccttt caaaataact  420
ctttcaaagt aaagttccca aaaagggtta tttaatccct gtngacatac ttcataaaaag  480

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gtcagatatt ngcaatattg ccaaacttta cggacctaata aagaagctnt ttaaagcacc 540  
gggggtttttt nccnggttat gcceng 566

<210> 9046

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9046

ccaatttgta attgtggaca agtgtaacct acttatttgc tagaatgatt ggatctagaa 60  
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ttgactcaga aagctctttc ttccctggtg cctttcccag cagcatttgg gcccatccat 180  
tactagagca gcaagtagag gttttggaat cagagagttc tgggtccgag ttgtgactct 240  
gtactttact agatgtggta tcctgagcaa gttacceaac atctcttctg taaatgggta 300  
tcatcaaaat gaattcctag gagtttgagg attaaataat gtgtatagta tacacaaaat 360  
ctagcattca gagctaaatt aagagtagct aagcagttca ataggaacta ggacccatgc 420  
ttcctgtttg actcttgagg caacactttt ttccatggaa agatctggct ttcttacaat 480  
ggctataaaa cctttgaaaa agcactggtg ctggaanact gggngtactn gcttggaaat 540  
aataccattc ctacattntt ta 562

<210> 9047

<211> 469

<212> DNA

<213> Homo sapiens

<400> 9047

aaatgtcata nngtttactn tattttaaatc ctgaggttna aaataaagta tttccacatg 60  
gcatggcaga cactatgaaa taatatgctt anggatacaa aagttttcca ccccattn 120  
gcagggtggng tgctggtatt tgatgtgctt ntagataatt ctttggcaga taagaatgaa 180

ttgggggtccc agaccaccca tcccgttaagg ccacatgaat tgaggattaa tcaattaaag 240  
 tgcaattcca aatgttgagc cttccaaatg aggcttgggn attgctctgc agccaccana 300  
 ggcanagtgt ctctgcatan catacatnaa gcagcctttn tcttttttta aatcatagat 360  
 gcccccccaa atttcaagat gtactttatt attntaaaag tgcttaagag gaanganaga 420  
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<210> 9048

<211> 566

<212> DNA

<213> Homo sapiens

<400> 9048

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 cctgacactg gaggcagggc ctatggctgg canagggacg gngttccatg agtgccactc 180  
 anaagcctcc cccggcattc tggggccctg gctnttccan agtccacatt caaggcaacc 240  
 tgagcacagg cttgagggan agtggagaaa ggccaggaaa ggatgccac acntttgcct 300  
 gccaggccca ggaccagctc tctcctacac tggacceaat ttccttctga tcacagaact 360  
 ggtctggatc aagacaatgg ggaaaactgg ngtggaagct gtggccaggt gaggcaaccg 420  
 ggcttcctgg taaaccccca ggcttttttg agccccanat gggcacttta ccaacagggt 480  
 tgggtaaaaa tgttacngag agctttgcc acctngggcc ctttgggtct aaaannaagg 540  
 ggcaanggtt ttttaaaaat tgncc 566

<210> 9049

<211> 576

<212> DNA

<213> Homo sapiens

<400> 9049

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 ttacaagcat gcaccaccac acccagctac ggtgttttct ttagggaagc tatttcatca 180  
 actatatctc agcttccacc caacctgttg attatccctg aggctttgta gattgcaaca 240  
 cggccgcttc cctctttaga ctggccatct ctacggctctc gggcatacat attcttctct 300  
 gagaaattgc agccctggaa gtcgaagtgg gctgaattca aggagatgag ctttggatat 360  
 agcatgtttt ccacctgggt gctctcatca ctaaagctgt ttccgtacat gaagcagccc 420  
 cttttggaag catgtcatgc aggtccacat agtaagcaac gccactctct ttggggggga 480  
 tggnatcang ggcttgactc tttnaagccc cgaaactggg ggggcataat ccacacctgg 540  
 tgaacttttg gtctgggtggc tctgggtggt ccagct 576

<210> 9050

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9050

ctgagataga gtctcgctct gttgtccagg ctggagtgca gtggtgcaat ctgggctcac 60  
 tgcaagctcc gcctcctggg ttacttacg ccattctcct gcctcagcct cccgagtagc 120  
 tgggactaca ggcgcccgcc accatgcctg gctaattttt ttgtatttta gtagaaacag 180  
 ggtttcacca tgtagccag gatggctctg atctcctgac ctctgatct gccgcctca 240  
 gcctcccaaa gtgctgggat tacaggcatg agccaccatg cctggccaag agtggtttct 300  
 aaaaatagag cccatgggtat ggctgagata ccagttgac ataatggagt ggggtactgc 360  
 aagtatttag ggctggcaag tagggaggtc tgaggctctg aggggagggg ctgggtcaac 420  
 agacaggctc atanagggt caaggcagga agtgttttaa taatgttaac gagtagcatg 480  
 gcataccgga acacncgatg aatgtcacct ttacctcaag gatttccgga cctnaaagct 540  
 attcaaggca tccagttaan tggnt 565

<210> 9051

<211> 580

<212> DNA

<213> Homo sapiens

<400> 9051

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cattttatatt ttanagaggg gtcccactat gtcaccaga ctggtctcga actcctggcc 60
acaagtgacc ctcccacatt ggcctcccaa agtgctgaga ttaaaggagt gagccacat 120
gtccagtctc tttticttat atgcaatact cattatagag ctagttgngt tttcctgcaa 180
ttttcttgat acccaaaatg agagcaagtt taacttaaaa atgctgcagg gtttatgcaa 240
tgcctatcaa tgttacaatt ctgaccact ctccatattt attactctca gtattctatc 300
tgtatatttc cttatcctat tttaaactgt tttcattttc ttgtttaatt gtatatgcat 360
ctatgtattt atttccttga aaactacact tgcataaggi agttttaaaa attaatgacc 420
actggttcta cactatgcaa aatatgcaan ggaccggact ctatacaggt atctacacaa 480
ctaaaaaaaa aaaggggntt aataacttta aaaagcccta caacctttta aaaagccctc 540
ntttnaaaat atttcatatt aaaagnaatc aacccccaca 580

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<210> 9052

<211> 545

<212> DNA

<213> Homo sapiens

<400> 9052

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aggtttgaaa tatctttttg caatagataa tcttatttac attaatacag aatcatttta 60
cattcctaaa tcagacacta atagatgctt tatttttagtg aattataaag gaaaacaaaa 120
aggaaactgt tgagaagtgt tcttcattaa cctgtctaac gacagcccga agatcctgaa 180
acacatggaa actgcgacat gctaccagag ctggtgaggg tgacgccgtt caccgtcccc 240
tccacatctg tctcgtcctc ggcgtagctc aggatcaggc tctgctgccg gctcgttagc 300
ctctttggaa ctcgtatctt gatgtggatg tagtggtctc cgtagccgta gctgttaatc 360
cgggggatgc ctttccacc catccgaatc ttctggtctg nctgagtccc aaggggggat 420

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cggcacgttg atcgcttgta caggccctgg gcttttggtt gacccccag aaaaagcctg 480  
 ggctnttnna ataanaaggc cgaaatggat gttggncccg ccttcngaana aaagggtttt 540  
 tttgg 545

<210> 9053

<211> 576

<212> DNA

<213> Homo sapiens

<400> 9053

aatgtacggt ataatttatt tattaataa acatttatta ccactataca cttctagaat 60  
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 caaaaaaaga catggtcctt gccctcatgg agctcacagt ctagctgaag cagacaaaca 180  
 agtcacaaat acaatggcaa agcaccaggg aagcattatg gaggaaagga ttggttctgc 240  
 ctggagtatg cagggcaggc ttcccagaga tggagacaat gaagctgggt cttggatgag 300  
 taggagttca ccagatgaag gggaaggggg taagcacatt ccaagcagag caaacagcgt 360  
 atgagcaagc agagtcttga aagcgcatgc catggtgcag gacgatgagt gttccagcgc 420  
 actagagcag aaaagtgccc caaactgaag agatgaatta ntggttgggg ttttgatgaa 480  
 acataagtgt cagaaaataa attgcccatt cacttacata acttaactgn gggtcttgna 540  
 cagtcccgta tcttaaaagc ctttnattca tnaann 576

<210> 9054

<211> 572

<212> DNA

<213> Homo sapiens

<400> 9054

agggaaacaa gattcatgtt ttatttcac agagaaactc aaaagtagga agctcctcct 60  
 tcctggagaa ctgtcacagt gacttcaggt caccaaaggg aggaggtaca gaaagatgct 120



ggtgtatgtg acgaggctgg tggccactga agcaccacag tgcagtggga agaaacaagg 180  
 agagacaagc tgggtcccca gcctaggaaa cagaggtgtg gcagccgggc cagggtggc 240  
 acaggctggg ggccaagggg aggagctccc tgacgaccag tgcttttcgg ggcctcgggtg 300  
 gtggttgcaa gaaattgcct accaaaactt caccactgc agcaggccag gttgcacccg 360  
 ggaagccgag gaagaagggtg agactcccc ctttgcaggg gtcttgactg agtacttccc 420  
 accataggca gtgggatacg catgctggtt gtaattgtag ttctgatcgg ttttgcctgc 480  
 acgtttcttg aatgatgacc cgtccgacct taataaatgg ntttcaantt gaggaaagga 540  
 tgtctgtttg aaatcctccc aantcgggtg aa 572

<210> 9055

<211> 493

<212> DNA

<213> Homo sapiens

<400> 9055

ccaatgaatc aacatacttt attagacca ctaagtgccg ggggaggggc ctgtgcccta 60  
 gagccagggtt acagggtcca cccgtagatt cagtctgggc tctccccatc atgcctctca 120  
 cttccagtct gggcttctaa taggagggcc cggacttctt ccttcccagt cattctctcg 180  
 aatggagaat ctttctcat tccagggaca ccaaggctca ggaaggggcc tatccatcat 240  
 cagtagagcc agacaagctc tcccatcgga cgtcctgtgg cggggcccag aaatgggtgc 300  
 cgctgcctgt gggactgccc ttccgggagg accagggtgt cttcagtgt cttggcctgc 360  
 acgtggagga nagtaggcag atgtctggtg ctctttaagc tcaaaggcat catggccctn 420  
 tcggaagcag cgggcacaga aaagncccca ttgagccagc gcancgtang gnggcatact 480  
 cantgcanat cca 493

<210> 9056

<211> 549

<212> DNA

<213> Homo sapiens

<400> 9056

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gttaaactat acactcttta ttattaatgt acatttatga aaaattctgc acagttacaa   60
aagtgcattg ttataaaatc atctccatac aaaggttggc atcttccttc taaccccacc  120
cctccccagc cctcccaccc ccagacatta gcacattaca ggacagtgtc tagaaaaact  180
gagagctctg tggatccagc tctccgcca gtgctgtgac aaacacaata gtgatttaca  240
aaagaccttg tgacgccctc acttcctttt tgcctcttcc tggggtgggg aagcgcagac  300
aattttctct ggcttttaga agatgtcctt ttgaggaatg ggtaagata tatcttttta  360
gtcttctact gctggaaagg atgtcagcac agacacgtat agggggaaaa tgggagctgg  420
angncttccc catgggtgaa gacaaacacc tgncttggac tgggtcaaatt ttcatacatg  480
tccctcctcg aanggagcca tgaaccttgg agcaacttgg agacctattt tgcaaagttc  540
ctgggaatt                                     549

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<210> 9057

<211> 488

<212> DNA

<213> Homo sapiens

<400> 9057

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gaaaaagtca tgaagcttca aatagatctn tatagcaatt ctgtctgcct tgaagtaaaa   60
nggatgctgt cgaagtncat cttctagttt taataagtcc ncatatgatc taagggtaat  120
cttcctcata cagtatgtat gaaagtcaaa ctgggtcatca gngattttct ctcaatctca  180
tgacatttct taagncttc accaaattta ttcattgctt tataagcctg ggencattct  240
gtttggaacc ncatgcncctg catttcattc aaattctnta ccgtgatgt tcttccctt  300
gnaaac'tttg agcacatttc ttcagcttct ttaatcaggt tggcttttag catgtatttt  360
gcacatttgg agttgataaa ctggctgctg ggtccaangg cctgggccta atccatcccc  420
ttgnaggctt ctttnaaant tncagctgct tatagatttt agcttcncga gaaagagttc  480
ttttaang                                     488

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<210> 9058

<211> 543

<212> DNA

<213> Homo sapiens

<400> 9058

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gagaatgtga gattttttaa aacaaagaca acataattca ggttaactct gttgaacagt   60
caataaatga aattcatcta cacctgaata aaacatatatt aacaattgaa aaaattttta   120
acaaccacaa aaagtaaaaa ctttaaacia acatgaacag gatttgtttt tagggcacac   180
aaaggccctt gcagcagatt ccaacagtag ctttactggg gtgtcttcta cagatgagtt   240
aaagagacag gctgagctcc acacaggcaa gatgactaac agggcgacag gacagtcaca   300
cagggcggag tgccacaccc ggctataatc cccagattcc actgcagagc tggctttgtg   360
cgtaggaggc acacaaagaa aggtgattca ggcagacatt attcaaagct acttcgtcgn   420
gtaccattgg aataatgggt gggnaaactt ttgggctttg gatttttttt taagttttac   480
tccttggtat taacttcctt atacangncc ttaaacttat gccgctgcaa aaacctatgc   543
cgt

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<210> 9059

<211> 495

<212> DNA

<213> Homo sapiens

<400> 9059

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cagaccagct agatattttt attaatgata tataacctct ttaaaacatg tatattttacc   60
aaaagcattc tgatatggca ttcctctagt gngacttttt gcatgtaaata taatacagcc   120
tttttgacct tccatacagt caggttcctc ttcagtgtgg atgtttccta acgaccaagt   180
tcaagggttt tccaacatct ctttcaactc tgggacttct caatgngtgc tttgacatgt   240
tcccaaagng gaagctaaaa acaaagaaga atctccacac attttacatt cataagattt   300
ttcacacttg tgagatcaca gctgaatatt aaggtataag gcagagtgaag aggttcaaca   360

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cattccttac agccagangg ccgtgcattt atatccaagg gtcacaagc tcaanagggc 420  
cccnggaaaa aatggaaggt ttttccctt cttacaatta tagnanttnt nttcagcatg 480  
gggtcaaacn ggctc 495

<210> 9060

<211> 409

<212> DNA

<213> Homo sapiens

<400> 9060

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tcgtcatta cctcaaactt ctgggctcaa gcaatccttc ctctcagct cctcaagtaa 120  
ctgggactat aggtgtacac caccaagctt ggctaatttt tcatttttca tagagatagg 180  
gtctcccaat gttaccaag ctggtctgaa actcttaagc tcaagcgatc ttcttgcctt 240  
ggcctccgaa agtgctggga ttataggcgt gagccactgt gccccgccga tttatatatc 300  
ttcttacatg atacatctta ttatcaattg acaagctgnt cttttacttg aaatttactc 360  
tttgggangc taggncccaa ngcttggggg gggaanggcc naagtnctt 409

<210> 9061

<211> 526

<212> DNA

<213> Homo sapiens

<400> 9061

ggggtctcag ttcactcttt ccttggttat taaatatcaa cttttcctgc ctaatgggct 60  
gaggntcatt ttccattcc tcaaggnaag ggtagactac ctaggaactt attgcatctt 120  
taggccagct ggcttanngc taccatntg aacccccana ttactacca agtcttcctt 180  
ttgccccttc ctgccctaac agcaagtacc aggccagtcc cttccccagc aaatgccagg 240  
ggcttcatgt gaagaggaac tggccacaag gctgagggga ggaggagaaa ctgtttctgc 300

aggaaggaca gcagtgcctc caggctnttg ggcatnttca catgtttcta gataaaggac 360  
aagctcaact ttggagcctc tggtaggcag aagaaaggag gcaagggaag tatggcctgg 420  
gctttaaaan acccggttnt ctnggatgga tccccagatg acnaaaggca aggttcctgg 480  
ggacctggag tcacaccagg gncctagcca agccttttnc tnagaa 526

<210> 9062

<211> 546

<212> DNA

<213> Homo sapiens

<400> 9062

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attcaataat gttccaagat accaatcaat acgtgaatca ttgctttctc ttggaagcac 120  
acattttggt aaatatttaa aacttaattt tcataatgaa aatttttcaa gatagtctct 180  
acatatgcct cctccccact taaattattt aactcttgaa tttgatctg ttttctgttt 240  
taagaagctc ttttctactc tatactaaaa aattcaaatt tatgaatcag ccagtatccc 300  
ctaagtgact atcttgggca aaactagtaa atgcccatatc tgaccacaat tattataaat 360  
aattaacata ttacaaacat ataacttttt tacctgtaaa taccataaa ttaggtaaaa 420  
tacaaaaact ccagcaacac atatgaaaaa ctggagnagg ttggtaaac ttgctggaga 480  
ttcatggcca ggtcccacaa cggnggcaac tggcttggat gnggggggga cattgggtng 540  
ggtttt 546

<210> 9063

<211> 530

<212> DNA

<213> Homo sapiens

<400> 9063

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aacctccgcc tcccgggttc aagcaattct cctgcctcgg ccttcctgaa cagctgggat 120  
 tacaggcatg tgccaccacg cctggctaata tttgtatttt tagtagagac ggggtttctc 180  
 tatgttggtc aggcctggcc tgaactcccg agctcagatg atccgccac ttcagcctcc 240  
 caaagtgtg ggattacagg cgtaagccac cagccccagc ccatatttca gatttttaaa 300  
 taaccactta cttaaaaaaa aaaaaaaaag aaaaaagaaa ccacatagtt gtgattcaag 360  
 aatcttcaaa tctatgcact tcaaactgaa gcaaatgaaa tacgtaaaaa tgtcgagtta 420  
 atcttcttgg ctctttctna aatcaaatta caaactctta acttcnggat tagtttccca 480  
 aattngnaaa agtagtctat tttaccncc aaaaaggggc cncatttntg 530

<210> 9064

<211> 540

<212> DNA

<213> Homo sapiens

<400> 9064

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 ccatccatta cagggttacc aggaggcaaa ttttatctac ataaatattc acatgaaaat 120  
 agtaacttac aaaaagaaaa aaaataaggc agcttcataa cacaattatt cttttacact 180  
 tttacaata taactcctcc cgttcagaat aaatatacac ccaatgtatg gagcaggatt 240  
 caaagtggat agtggcttgg ggggtgcttag acagtgttat cgcttgggac ctggagtcct 300  
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 tctcctggag ttgccttggc cccctgcagc gctgctttct gaagtgtcgg aacaagcaga 420  
 ctgcgtctct aagangtcaa agtcagaacg tcaactnctc gccggctgct gggctcgact 480  
 ccgggtcgat tccannccga ctccaaggcg actggnagac nttttanggg ctgccnaata 540

<210> 9065

<211> 553

<212> DNA

<213> Homo sapiens

<400> 9065

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atgttttttt ctgtcagttt aatccatttt attgacttct caattaacaa caaaattcat   60
ttggacagta aatcagaaaa tactttctat ggtggcttta aattacattt ttttaacccaa  120
aaatgttata cagagccatt ttagacaacc aatgtatctt aagtacaaac ggtaaaaatt  180
cacattccct tcagtaactc tccttccact tagaacacaa tgaacttctt aggtaggcag  240
agttctcggt cacttaacca caaccccat ttagcacaga actgcagcaa aaagaattga  300
agaagtgatt agaaaggata tgcattatta ataaaccata tgctatgtga gtgttaggtt  360
cccacgaaat attttactgt atatttaaaa aaaaatccct tctcaagggc actgctttca  420
ttcaaggact gatttcatta cctacttcat tatcttttat aggggaaatg ctccntttca  480
aggtattaat acacactgga gttggtacca ggnaacactg gnctacacct ggaggttaaa  540
atnttagtgc ngg                                     553

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<210> 9066

<211> 545

<212> DNA

<213> Homo sapiens

<400> 9066

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gagacagagt ttcactgtcg atgcccaggc tggagtgcaa tggcatgac ttggctcgcc   60
gcaacctccg cctcccgggt tcaagtgatt ctctgcctc ggcctcccaa gtagctggga  120
ttacagacat gcgccaccat gcccggttaa ttctgtatit tcagtagaga tggggtttct  180
ccatgttggt caggctggtc tcgaactccc gacctcaggt gatccgcccc cctcagcctc  240
ccaaagtgtt gggattacag gcgtgagcca ctgtctcttg cctgggtctc ccatttctag  300
ctgacttttg gtgacacaag acagctgagc acatgcacct gcgcccgtc atgcacaaga  360
ccctcctgca accacagcaa aggagggacg cagggtgtcaa ccctgaagga cacaagaat  420
gggaaagggg aaggccgcan tgggagacct gtggcatttt cngagagatc ccgatgaac  480
gtncaggaac nggctttgac tncatagagg aggggttccc nccaagggga agggggtttt  540
cttaa                                             545

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<210> 9067

<211> 557

<212> DNA

<213> Homo sapiens

<400> 9067

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acaattttta atttttttta agacagtgtc tcactctgtc gtcaggctg gagtgcagtg   60
gcgcaattag aactcactgc agcctcaacc tcctgggctc aaacaatcct cccacctcag  120
ccttctgagt agctagcact acaggcacac gccaccacac ccagctaact ttttgtatit  180
tttgtagaca gggtttcacc ttatttctca ggctggctct caacttctgg gctcaagcaa  240
tccaaccgcc tcagtcaccc aaaatgctag gattacaggc gtgagccatt gcgcccagcc  300
tcaaaactct tctacctaaa atcaccttca gagccatgct agaaaattag tatattcct  360
ttacaatcgg aatccaactt ggccactaaa atgtttcctt agacttggtc ctaaattgatt  420
tttggattgt ttcaaaacct gaaaaacacc ttacacaggat aaagattaaa gaatgggcca  480
ctggatctga gaacatttca aaaagaagtt ggacttttaa gcttttgcca attccnggga  540
aatggcttt ccanatt                                     557

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<210> 9068

<211> 502

<212> DNA

<213> Homo sapiens

<400> 9068

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aaataacaaa atatatttcg atatgcacag ttttaactga ggacacacaa gccttcctcg   60
ggctgcaggc ccaccgccct cccagtggga ttacacagccc ctgcggagtt tgtcctcag  120
cacaccacac acgatcgggt ataaaacaca ttctataaac acgttctgat gcaaactgtg  180
tgtccataaa tatatattta tgcaagttcc tcccaccacac tgcagggccg tacagctctg  240
gggacaggag gtcacagccg actttaaac gcaggttaag tagaagggtg caggtcaaatt  300

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agaagtcccc gtgtgattgc atcacccaac ggcactgttc tgtcatcagg aaatgctgag 360  
 tgcccgccgt ggccgggtgg gcgcgggcgg tggtcagacg ctgctctgga gctggctatg 420  
 gcaaagaaga ggacgcccag caccttgtac aggagcccca tgatgaagta ttgtanccgg 480  
 ntnatgggcn nattntggna cc 502

<210> 9069

<211> 543

<212> DNA

<213> Homo sapiens

<400> 9069

aagaagtgca tattcttttaa tccaggaatt actcaagaaa tttatacatt ttttaaaaag 60  
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 cctgtcctat atgcgctcta ccagatgact caattatatt ccatccatcc atggaatcct 180  
 agacaatcat aaaaggacat ttatgttaac atggaaagtg aagatacgct ttgaagaata 240  
 ggctacaaga gagaatacat tacacaatcc tactgtctgta taaaacaaaa catctggaag 300  
 aatctatgct taaatattaa tagtgtgtcc cgcaaagtgg taggataata gtgactttta 360  
 ttctttttac ttatctctat tttctcatgt ttctgtaatg aacatgtttc ataaaacaaa 420  
 atgggtctgn tataaaaaatc tgaaaacttg gttttgaaag agagcagtat tacaggctgt 480  
 aagtggcaaa taaaatttna tggtaaatat tccgcttccg gggaaataac cccattntta 540  
 nta 543

<210> 9070

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9070

ctaatacatg gggttttctt acattgtcct ggccgatctg caactcctgg gctcaagcaa 60

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 ttactgtact agggacattt gtggcttttc cacaatgaga cttagtagag aaatgacagc 180  
 ttcccttggc cctatcctga aatacactaa ctagctcttc tctgccaggg ctaccgtttt 240  
 ctccctaacc tttgcagatg tatgtatcca tataaatggt tctatttcaa caaactgtag 300  
 aaagtataca gtctgtacag ctccccttat aatgctatta cctgatgac ctgactacaa 360  
 gtiggaatta tctgcatact tggcaaaatt caagtgtggc tgcctatgcc tcgagagaat 420  
 gagcagcaaa ccagcccagt cctaaattcg aatagcagct cttaaagaga atanggagct 480  
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 ctaccaggcc attttgaggg ga 562

<210> 9071

<211> 549

<212> DNA

<213> Homo sapiens

<400> 9071

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 tctatgcgct ccctggagag ggagcaactt gctaaggtag agtcctgtcc attggcatgg 180  
 atatttattg ttccacatgt tgggaaaacc atgtgcaata aaaatcaaac atatgaaaca 240  
 atggctgtca ttgtaccaca gtatacattg tatcttgggtg aaggttctta aattactcct 300  
 tggagtttcc taattcactt caggaaggat ttgttgtgtt ccgtctttat gctgtcactt 360  
 gcaaacactt ttgctttgct agttcttgta ttagatcttc atatacttgc aaaaagaggt 420  
 cctcttcaga ttttgntcca tccaggtcac aacttccatg tgatgtcctg catttcttgg 480  
 ctgncttttag atcctgggca cacatnggcn ttaaaagatt cccgaaagct tggaggntaa 540  
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<210> 9072

<211> 494

<212> DNA

<213> Homo sapiens

<400> 9072

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cttatggatt ctttattgaa tcacaaacaa ctcagggcac caggccccag cagctgcatt   60
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tagcttttca ctatatagag taaaaacatc agaaatcacc ccaagagaaa ggacatacca  180
aatgcccacc agaagggccca gggactgcaa gccaccctga gcgcaggagg gtgtggtgaa  240
gggtggtatg gccccgaaat ttgtgtgtgt cccccactcc ccctgcaaat tcacattgga  300
attctcacc ccaaggtgac agtattagga ggtggggcct ttggagctga ttgggtcatg  360
ggggcgggtgc cctcatgaac agggttggag tccttataaa agaggcagga agaggatgca  420
ggcgttgacg ttgntgtana aagtcaggcg ccanatgctt nccgtcaccg gcnggagccc  480
tttgnggggg aaan                                     494

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<210> 9073

<211> 534

<212> DNA

<213> Homo sapiens

<400> 9073

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aagctatttt aagtataaac tctattcctg aatatcttca gatactttct gctagttcaa   60
ataaactcac acagacatta atccaatttg aataactaca tatgaatgag gctacagtat  120
tattcaatcc agagtgtgtc acttccgttc atgaaggctt gctatgcata aatataaaaa  180
tattttatct tctgatgctt tcatttttga agcactccct tcaaaggatg taaaaaata  240
ttaaataaaa gagctttcaa agtgttctgt taggctatga tttagagggg agatgaatgg  300
aaatggatat tgatagttat ttaactggag atctttgtgg tgatatgtga aagtataaac  360
taactccaac aaactcgttt tticctgaaa cttttggtgt aaaattatat attattatta  420
ttttgagaca gggctttgct ctgttgccca ggccaggctg gaatgcaatg gcatgacctc  480
ggntcactgg ccctggcctc cgggctcaac gatcttccat tcagnccant ccan          534

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<210> 9074

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9074

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atatctatta gtaagattag caaagatact gttgctatit ttatatttgt cctttaaaaa 60
ggtaggccct tctccactta ctcccatatc cctagagaaa tagatatatg tactgttgtc 120
aaaaaaaaatc aaacacacaa atactggaat attaaaagac aggctcctca tttcttctct 180
tcctcatcct ggtacacagt gcccaaaagc tttagaaatg ccattatgaa caatagcttt 240
tgctagtgtg taggaaagca atttatgagt tgggaattat tgtggaagac ttgatggatg 300
attatagctc tgggtcacta acttcttttt atgaaaacat gaataatact agttataact 360
caaagtcaaa atagtgtaaa agctgtggag tgctttttgta gggggtatat taaattgcc 420
gaatattgca gaggctcatc ttggaacaag aagtagaatg ctggttcagt taagaggact 480
gggctgggtc aaggcacaga ctgntcantt cgcatnaca gtggtggctg ggggttttca 540
tcaggcatta ctaatgggna tggga 565

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<210> 9075

<211> 381

<212> DNA

<213> Homo sapiens

<400> 9075

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aaatctcatt tctgtttttt tattgtcttt tatgttaaac tttctacaaa aggatgtata 60
aacgggtaag taganaatct ctatctacaa aatgttttct cttttaagta ttacattact 120
tggtgtacat ttaatagact gacatatata agcacataaa aatcatttta cgtaatacgc 180
tgcgaaatac gttgactcct cctccgcctc acccctgaan tgcctcctcc tctatcctcc 240
ccatcacttt catcatcttc tgtctctgct gctgtattat ttttagggnt gcctccnccn 300

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agcagtgagg tnattgcttt gttccnagca tttgtgctag ctgaaactcc ctttcttctt 360  
cttcttcacac aggggtccaaa t 381

<210> 9076

<211> 568

<212> DNA

<213> Homo sapiens

<400> 9076

ggtatttgca gaatttagct gagactgtta caagcggttt atcaaaataa atgcttgatt 60  
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aggagagag aggttaaata ctttaattac taacttgcaa aaagatttcc atttgaatat 180  
ggaaacaatg taaaggggtc cctaattttt gtgggactgg aatcactcca gaggatttaa 240  
tgatactgct gggcaactga aactgtgcaa ctgaataatg tgatttctaa gcatatttcc 300  
ttaaaattta agtgctaggg aacattttaa aatgggttact ttaaaaggaa ggttgaacat 360  
gcnaatttgt aggggagagg aattaaaaca gtgatttctt tcaatgatac atttttcatt 420  
ttctatttta aaacgaaaac catttacttt tgagtcaaca ggcatgtgac anaaagtgct 480  
acatananaan aatttcccca ccaaggactg cctggatggt acttgaaaaa cncaggtta 540  
attatttctc cncctttaaa acatactt 568

<210> 9077

<211> 343

<212> DNA

<213> Homo sapiens

<400> 9077

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caaacatttc cctacatcaa tcaccttcag ttggaaagtg cctctccnta aaaaganatc 180

aaaactcacc ttccaggtag tgattactgc gtnagtttca tggaggaaaa aaaaatattt 240  
ataaatgtga aattgcctct aaacaagggg naggtgcatt tccntcnctt gtttaaaaca 300  
ataacatgaa gatcaccng tttgtcttc tcnngtgaaa agt 343

<210> 9078

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9078

gagaggaggt ctcactctgt tgcccaggct gggagtgagc tgggcgcaat ccacctcctg 60  
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acgcctgggc taattttttg tatttttagt agagacgggg tttcaccatg ttagccagga 180  
tggtcctgat ctcctgacct tgtgatctac ccgcctcagc ctcccaaagt gctaggatta 240  
caggcgtgag ccaccccgcc cggccatgtt tttcatctta attcttctat tgattaaaaat 300  
gtgttctgta aactagaata tgatatcgaa gtatgaagtt caagtttctt ctttcagttt 360  
cagctgatag caaataatta attataccag aatgaaaagg cagaactgct ccaaattgcac 420  
aaaacttanc tagcactaaa anaaatactg aattttcccc catagtatat aatattttat 480  
tgggaacaaa aatattttaa tgaatttcnc agctatatatt acncataggg tncgcggan 540  
aaggaaanat tgattacctg ac 562

<210> 9079

<211> 525

<212> DNA

<213> Homo sapiens

<400> 9079

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gctcactaca gcctcgactt cccaggctca aatgatcctc ttgactcagc ctcctgaata 120

gctgagacca caggcacatg ccacgactcc cagctaattt tttttttttt ttttaaatta 180  
 gagatgaggt ctcactttcc tgcccaggct ggtctcgaac tcctggcttc aagcaatcct 240  
 tctgcctggg ccttccaaat tgttgtaagt acaggagtga gccattgcac ccnnccagga 300  
 aaccanatt canaaaggat atctgtctag agaaaaatct cattcagtga atttaatact 360  
 tacatacaac tatgacttgt aagtccagaa gttttagggt aagaaaacat gtnnccattg 420  
 tncccaatgg agaattfaaa gctcaatgtt ttttggtggc tccaagatca agccaccatg 480  
 tttatcacct tatcatanaa accaaatttc ctgaanantt gccc 525

<210> 9080

<211> 347

<212> DNA

<213> Homo sapiens

<400> 9080

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 ttcagtcaaa atagttattt cacagggtgaa accactaagt agcttacttc ctacctttta 120  
 aattaataaa gttacagtca gccacattgc ttgagtcttg ccaaaatctt tagagaaaca 180  
 acacaaactc agacatctaa gtcagatcaa attanagccc aatatttttg atacttttat 240  
 tgtatatgac tagttttcta naaaactatt ccanaanata cagtcttcct tccanaaaat 300  
 acagctttac tgtccttaag tgcctaata ttttcnagag gaggagc 347

<210> 9081

<211> 520

<212> DNA

<213> Homo sapiens

<400> 9081

ccatttgctt ggtaaataatt cctccatccc tttattttga gcctatgtgt gtctttgcac 60  
 gtgagatggg tctcctgaat acagcacaat gatggatttt gactctatcc aatttgccag 120

tctgtgtcctt ttaattgtgg catttagccc gtttgcattt aaggttaata ttgttatgtg 180  
 ttaatctgat cctgtcatta tgatgctagt tggttatitt gcctgttagt tgatgcagtt 240  
 tcttcatagt gtcgggtggc tttatagttt gttatgtttt tgcagtggct ggtactggtt 300  
 tttcctttat gtgttttagt ctgccttctg gagctcttgt aaggcaggcc tgggtggtgac 360  
 aaaatcgctc agcatttgct tgtctctcag gattttatitt ctnccttgct aatgaaagct 420  
 taattttggc tggaatatga aaattctggg ctgaaaatcc tttccttaan aaagttnaat 480  
 attgggcccc cctcnaatc ctggnnttgt tagggttcca 520

<210> 9082

<211> 454

<212> DNA

<213> Homo sapiens

<400> 9082

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 tcaccgactc agcaggaagc agaacgagct gttccttctt ttgacacgca caagctaate 120  
 ccctanagag tggggatgtg ggaaacggag ggtaattaat tctttagtca ctggttcact 180  
 gctgaatagc cttggtcagt tttggctctc tcctatittt gggggaaaaa tatttttggt 240  
 tctttttttt aaaaaataaa atgttcgcac aatggggaga aaattgcttt aagtgttaca 300  
 ccttagccaa cagagcccaa actccgtgtt tccgttcttt ctctttcggg ttctgctgaa 360  
 ggctggtgac aactggcct cttgtcagtg gctgccggca ngggccagga aacaaattna 420  
 aactgcanca cagctcantic caaaaanccc tggc 454

<210> 9083

<211> 527

<212> DNA

<213> Homo sapiens

<400> 9083



acataaatta acccatttat tataggccag tgatgtctca aagagtagag gagcgtctac 60  
 tgggtctttca actccttcag tcttctgatg gcggacttta ccgtgacagc ggaagtggta 120  
 ctggaaagaa agattcagtt tccaacataa ttaagcatgt taacatagaa aatggcaaat 180  
 aagtaaactct gcctcgtttt tgtgttaaag tcgcttccca aattttccta gaaagaatta 240  
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 ttagattact cctcggaat tagtggcttc taaactacat gatggcatcc ttttaagaagc 360  
 catgccttca ggatcttgca gaattngaca tacaatctca tgcactgat ttctcaaccc 420  
 agagttgctt ttttttttat aagttactcc agtttgtgga caagccangc ttttaactccc 480  
 ccctaccect ccattgaaaa aaaaaattgg gtcctaaaaa ggtngaa 527

<210> 9084

<211> 331

<212> DNA

<213> Homo sapiens

<400> 9084

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 tcgggaagtg cacacaaacc gttgtctttc ctttttggtt aaagaaaaaa aactttgtna 180  
 tcaatatccc gtcataant aaaagtggaa aanaagaaac ttgactgctt tcacttggcg 240  
 ttttggcatc tcctctccca ttcatatgc acagtttatt tgggtnatgc taccgtcacc 300  
 agcanaacac ctgtnagtna aaacnaatgt c 331

<210> 9085

<211> 456

<212> DNA

<213> Homo sapiens

<400> 9085

gagaaaaaaa gcctgtcgcc caggctggag tgcagtggcg tgatctcggc tcactgcgac 60  
 ctctccctcc cgggtccaaa cgattcttct gcctcagcct cccgagtaac tgggaccata 120  
 ngcacgtgcc actatgccc gctaactttt gtgttttgag taaagacagg gtttcacat 180  
 gttggccagg atggtctcga tctcctgacc ttgtgatgta actagtattt cttatgccct 240  
 tattttgtgc taggcacagg gcctcaccca ttattggcac tcggttaagga ttcttgggat 300  
 taatganaag ttaacctaaa tcttcaccaa aggccctga ncttcccctc gattcacata 360  
 caanggactg gggctctgaa aagtgggctg tgatgcgccc ctggaaaacc cacnaatggg 420  
 cctgcanaac tgattgggaa ggttcatgca nggnca 456

<210> 9086

<211> 304

<212> DNA

<213> Homo sapiens

<400> 9086

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 atggtggact cattgaaata agtctcctcc aggggaggtt catctcaggt ctaccctgga 120  
 ncagggaaca gtgtctctga agtgggtctg gcttcacagc tgattgcggt tccgcttagg 180  
 gatgatcttc cggtaggttc tgcgctctga aatgttgcgc ttcaccttgg ccgtgggtggg 240  
 ancctcatcc tgggtgcangg acgggctcga ntgggacttc ttcangctga ncttgggctc 300  
 ccga 304

<210> 9087

<211> 440

<212> DNA

<213> Homo sapiens

<400> 9087

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ctctcagcta cacatggagt cagtgctgcc tgcaaagaac agagcangcg ctggcagact 120  
gaccttcaca gaccatgcta aaaccctctg aggaagtgcc tggatgaatgc tctggttgat 180  
gagattcgag ccattatggt accgancagt gtgcttctta cctataattc cactgtcctt 240  
gctttccagg gtggaactag ggctgcta at ggtctcacag ggacttttgt tggctgccgt 300  
cttgctgaca canctattca aggttgaaca ggggctatcg gtgctaggan atgcggtgct 360  
gcttgtagt gtggagcaag gactgatgcc ttgactcana nctgtgcaca tggtttcatt 420  
tttgtcttcn atggttatnt 440

<210> 9088

<211> 452

<212> DNA

<213> Homo sapiens

<400> 9088

gtttctcttt tgcactgtta ttttattttg tttagtccat atattatata aaacataaca 60  
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ctttgccttc atgtctacag atctctta atattgttgg tcttgcacct tagatatcaa 180  
ataaagatat ctagcttgac acaaaaattg gtagctgcaa ggtaagctg tattagtttg 240  
atgatgggcc aggaaatgat atattttcta aattttgtcc ttaaattattg gctgtaacaa 300  
atgctgatat agcaaaaagt nagcttctat tagacagcaa ganggaaact tgagtgaatg 360  
aatgcaactt acctccaagt cctcttaaag gaagtaaaaa aataaatact gtgttttacc 420  
agtgccccc nccaancatt attctnagcn tn 452

<210> 9089

<211> 540

<212> DNA

<213> Homo sapiens

<400> 9089

ctaatttaat tctttatcat tcaagtagag agacaggcat tttccaaagc aaacccaacc 60  
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 caccttggtt ccaggcatca cgccagtcac tttatttcca tcatcatcct tgtgaaaaaa 180  
 tgggaagtctg ganaggtgaa atgatgaagg caatctggcc acaaattctt cttctggatc 240  
 ctgctcttca gggcatgcat ctcccatgct gaagggttaa atgggggtca tttgccaaca 300  
 aatttggtan tccgcttctc cctgaagctg ccatgccctc tanccgggtcc cgggttggaa 360  
 tattctgggc atancacatc ccttcaatgg ccateccana tgcaatgtcc acctccgttc 420  
 ctcggttaat gggctacttt gccaaccgc acngcaattg ggggctgggg caagatctcc 480  
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<210> 9090

<211> 588

<212> DNA

<213> Homo sapiens

<400> 9090

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 tatacaatat aaaataaata catttacaca aatggacatt tgctggagca cacagtatgg 180  
 tacacatcac aaaaatatac aattgattgc tttacagatg tgaagcccat ctacagctat 240  
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 aaatgttttc ctaggcaggt aaacaganac gcttaaataa ttaaaataca atcaccaaca 420  
 cccattttct cttctataaa aaaaatanca gttttaaatt tttatatct tttatgttan 480  
 catttaaatg caaaatatgg gaataaatac aacaatctgg tttgattgaa acccatntt 540  
 tctncaggaa tccccatcc tttggcttta attaaaacaa acccaaaa 588

<210> 9091

<211> 469

<212> DNA

<213> Homo sapiens

<400> 9091

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ggggagtgga taaagtgcatt ttatcttctt ctatgtttgt ttttgtaaaa aggagaaaagg   60
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ggaccacccc ctaggaaaag gtgtangaat agaagcaatg gcattggcgc tatantccat   180
ggggangaag tgcctgatgt gcctggcccc taggctggcc ccaccagag cggaggagtg   240
cctcagcttc atcagggtga aactgganaa aaantttctga gcctggatct ctctgccctg   300
ggtcagcacc aaaagaaaac ctctcttcag cagctcccag ctcttcaca cagaacccac   360
gcacaggatg gggagtccaa tcttgccctg gaacaagacc gggatcaatct cgggcaacac   420
tgctacnatg tntctgcccc ncatctcccc ancctctctga aaatatanc               469

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<210> 9092

<211> 555

<212> DNA

<213> Homo sapiens

<400> 9092

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aaatatacaa cttgctttta ttaaattgaa aaaaaaatcc ccaagangca gatatcccag   60
tagtttttagt gaaaacaaat ttaatatcat cttgtttgaa caaagctttc agaataagtg   120
agcaattaaa ttcttaaagt agggacagaa caccaacagg ctctagactc cggaanagct   180
gtaagccgac aaatgggcat tgttttgctt aacagtttta gcttcaatgt aaatatatat   240
tattacttag aatattagca tctgaactat ataatgacta ttttatcatt ttacttgaat   300
taaaaccaga atttctggaa ctcccaaata gtcttttaag tttttcaata taaacataaa   360
ctaacccta ttcctctcta catatcaaat gtgaaataac tgcacaata taccagcatt   420
ttcacagaaa gatgtttaag gcttctggca cataaaatgt gtaatttccg tgtgacaagt   480
cntaattatn taccgaaaat atttaaaatt attggtaaaa ttaattcnta agaattanaa   540
aaccagaatt nccccg                                     555

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<210> 9093

<211> 610

<212> DNA

<213> Homo sapiens

<400> 9093

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aatcttttat tttttattgc atacatcaat atttaacaga agaaaaataa agaaccacct 60
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atgtatcagt aaacacaatt tatgttctta ttaacatttt tgaatctcac ttttttgcac 180
acaatttgac atatatcaat attattgaat ggctatataa cattctgtga tagcactagc 240
aatacaccaa aatttactta accatttcca atcggtgggc ttttttcccc cttaaagtta 300
tctgagtgga actgctanaa aactttgtac aaatagcttt tctttctttt aaatattttc 360
ctgggcatat gccactcaaa gtgagtatgt caaaagatca gttataaagc cctttttata 420
gtctttctaca cagtttcttt aaaaggntac taatacacaa tgctgtgctg ataaggacca 480
tgcnattaaa acagtttggc taatacaata catgaactaa ttcaanttgg ctttttaatn 540
ttaggaaatt tgaataacctn ccaatgaatt ttaaaccctt naccctaaac ctttaaantt 600
gccaaaaata 610

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<210> 9094

<211> 437

<212> DNA

<213> Homo sapiens

<400> 9094

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agtagacagg gggtttcacc gtgttagcca ggatgggtgt gatctcctga cctcgtgac 60
cgcccgctc agcctcccaa agtgctggga ttacaggcat ganccactgc gcccggcctg 120
cttcctgcca agttaaacgg catgctaagc tctcagctcc ccatgcccaa gtggacttga 180
aaggcttacc ccagccctcc ttccacagcc catcctgagc aggctgccta ctccaggcag 240

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gccccaggct gggctggacc atttaatcct cncagccctg gtaaggctga natcacggat 300  
 cccacttcat aantggaaaa aactgaaagg ctcagggggg gctgaaatct ctactctaag 360  
 gtttctttct ctcaaaattt ggtcgggaag ggggtctnct tntctctggg gcacttttct 420  
 tatcccnccc nangggc 437

<210> 9095

<211> 320

<212> DNA

<213> Homo sapiens

<400> 9095

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 atctcacaac aggcatTTTT actgaaatac taggaatttt ttcaatacaa tcagtttagaa 180  
 atacacacaa attacttgaa aaaaaaaaaa gaggaggcca gataggagct caccncttg 240  
 tccaanaaca nctgggtccc ccngcaggc tccaccgctg aggttcctga cattatctgt 300  
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<210> 9096

<211> 526

<212> DNA

<213> Homo sapiens

<400> 9096

gagatggagt ctcactctgt acccanctg gagtgcattg gcgcgatctc ggctcactgc 60  
 aacaacctcc gcctcccggg tgcaaacgan tctcctgtct ctgcctcccg agtagctggg 120  
 actacaggcg cgtgccacca tgcctggcta attatttgta ttttagtaa anatgagggt 180  
 tcatcgtgtt agccaggatg atctcagtc cctgacctcg tgatccaccg tctcgccctc 240  
 ccaaagtgt gggattacag gcgtgagcca ccgcgccag cctaactatg aggtgattta 300

aggaaagtaa tgggaagggtg cacttaaag cccgtgtgatt ccctcttttc tttatgttaa 360  
 tctggaaact tgtagaaaag ccttctcttg ataacaaatt ttatgtnact agctcaaaca 420  
 gtgatttgcc agattttactt aatcnaggaa tatattttng anggaacctt ccanaaaatt 480  
 ttgggttaat ttggccttcc ttatcctaaa atttaaattc cccctn 526

<210> 9097

<211> 611

<212> DNA

<213> Homo sapiens

<400> 9097

gaaatttcca aattgcttct ttttcaactt tttattttga aaaatttcaa acccacagaa 60  
 aagtttcaag aattgtgcaa tgaacacccc atatagcctt cacttagatt catctcatca 120  
 attaatgttt catcaaataat gttctctctc tctctctctc tctgtctctc tccatgtgtg 180  
 taccctactg aaaatctttt tgcagaacta tttgggagtt ttagacagct ttgcccccta 240  
 taggctcaaa ctaatttcag ctcagaacaa gaacattaac ttacataacc aatataatatt 300  
 aaattcatga aatttaacat tgatgtccca ataataccag ttatttttca gtcacttttt 360  
 tacagtcatg tttcctacta atctaaaatc caatccaaga tcacacactg catttagttt 420  
 ccaagtctcc tgagtttgaa atagttcctc agcctctctt tgactttaat gaatattttt 480  
 gaagantaca gaacacttat gaatggaatg tgttgaattt ggggtggctg aatggttctc 540  
 ncgatcagat cagtttatgc agttttgggg agaaagcttc nnaaatnata tgtgtgttct 600  
 cctggctncc c 611

<210> 9098

<211> 606

<212> DNA

<213> Homo sapiens

<400> 9098



gaccatttcc cacaatcttt tattaagaaa aattccaaac atacagaaaa gttgaaagaa 60  
 caagtacact gttcactgaa ataccagcca ctgcagattc aacaatgaac attttggcct 120  
 tatttgcttt gtgtattttg gggggaacta tttggaatta aattacacat ttcttgaagg 180  
 cattcaccta tataatccag catctatctc ctaagaatga ggacattttc ccatgaactg 240  
 cagtaccgtt aaatggctat tanaggaatg gttggtcttt gtgagggtct cacgtccagg 300  
 aacctcatca aagtgtgcta ggcccttanc agagagggtg gaacctgctc gccggctccc 360  
 tcaccttctc tcccatccca naaaggcaga aacangagggt gctgtgaata gaacagtgcc 420  
 ctttgtggtg acaaagctat ggggancctg ctgtgcatgt gccaaagacct gcagggcagc 480  
 tccccacccc ccacaggga ctttgaactg catggttttg tccncttctn cttttaaata 540  
 tctgaanttc aaataaatct tccccaaat cntctccnat tagaaacctg aatgccatct 600  
 aaaacc 606

<210> 9099

<211> 597

<212> DNA

<213> Homo sapiens

<400> 9099

aattgtttca ggaaaagttt atatattcag cactacagat aagttttttt ttaaaggana 60  
 acctttttcg ctgttataaa caacttcatt tatagcataa taaacatact ttcagtcaat 120  
 ttctttacaa tctaaagacc cctgaactaa attttatgtt gtgtcttaag tatttcaaaa 180  
 cccatccatg tcaaactgat aattttacta ttgcttgata ctatgttatt tcccttatgg 240  
 gtaaaacttc gatcagtggc caaatctgaa aagcaagaan acactcttgt catctgaaca 300  
 gttctattag gatgttggtt gctttttgaa aatattatat actaactctt aaattatatt 360  
 taaatgccag ctacccaatg gtgccagaaa nattattgca attgttttta cccaagtata 420  
 atttttaaaa taaaatcatg ttgcattgca tttttctaaa atcattagat ttataattga 480  
 ataagggtta acttacaatt ttttttaggg ccccaaaaaa aaaaaaaaac ttttttgaat 540  
 nccccctatt tntttctccc naaaaggtag ggtatttttt tgtttaacaa ccnctn 597

<210> 9100

<211> 399

<212> DNA

<213> Homo sapiens

<400> 9100

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attcaaaaca cttagtaaag gaaaaggaca caaggaaatt ctgattaaag tcttctcctg   60
ctctgtttgc aattatacat gccttcaaag tcatttgaaa gtaagaccat ttcctttggc  120
aggtatcttg tataaagtaa ctttacaaca tatgtttctt gaacagaaac ttacaccac  180
tgtcattatg ttacctatag anacaaaact actaacacaa gtaatatggg cttacaatta  240
taacacaaac ctgtgagagg gcatgataaa attaaatitt gattgccttc ttttattatt  300
atcactacta ctgtctgctc acaaattctg tggccanant ccatttcaa tccttctaag  360
antccacttc atganntaaa catatacata tanaacaaa                               399
```

<210> 9101

<211> 477

<212> DNA

<213> Homo sapiens

<400> 9101

```
aaacatatga tcattttaat tacagatgat tgaaatacag tgcaacagat gagacagata   60
caatactgta ccagttttta aaaacctgaa ccanaacggn ttcgcattct agtacactta  120
cttacttaaa acaaaaattg cttagataac aaaactatac ttcaagttgt tttanaaaca  180
gttctgcgct aggaacatac aaaggaaaat gaccgtttgt gcttctttaa aatcgaatga  240
nagtctcctc tagggctcctg ctgacaganc cccccagcc tccgccaggt gaggtgcaca  300
gggcccactc caggcaccag ctccccccaa cttggcttct ctggtttgtc gaaagcatca  360
tccantccac actatgttta acagtcctan tcaccacggg gantaaattt ttctgaaggt  420
ctcatccgtg gaatccnacc gtacataata antttacccc caatcccnat tgaatcc     477
```

<210> 9102

<211> 366

<212> DNA

<213> Homo sapiens

<400> 9102

```
ctcttcgtaa aggattcaaa gcaggcacag tgggtgtacac ttaaagtccc agctactang 60
gaagctgagg cangaggatt gcttgagccc aggagttcaa ggccagcctg agcaacatag 120
tgagactcca tctctaaaaa aaaataaaaa taaaaataaa taaaaaatac aactaatgga 180
aagggaaga aaaaaaaaaa aaaaaaatta aaagtgttc ggagcagtat tcctgcaaga 240
agctcccggc gcatgtatat ttacagaaaa tatgtacatg cagcaggccc anaggccacc 300
anaaggcaga gggcttctgt aacaattcaa gcctctgggc ttgaaccag ggaatgggtg 360
gcttcn 366
```

<210> 9103

<211> 440

<212> DNA

<213> Homo sapiens

<400> 9103

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gtgggtaaca tcttgattta atttacaat aaaaagccaa aaccctcaat gcaaaggaaa 60
actgcagttt acacttattc tgganacat ttttaaccac agaaaatgtg cccctgtagc 120
atgtttttta atggcaagtg ctatgattgc ccanacatcc ataaactgct tgtatggagt 180
aagaaattca taaatgaana aanatttgtt ttctgtcttg tttctcctag gtcacgaaca 240
ggatatttcc cacaaaatgt ttgacctga aaggaagtat gattccagta cttctgggtc 300
taactcttct gaaattacac tgcaagctga aacttcnggt tacttcagcc acattttctt 360
ttatcaccca tttccatgt ttttttggct taaaaccnc ctgctgtccc ccnttcccc 420
ccgttcncng tgttcganta 440
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<210> 9104

<211> 482

<212> DNA

<213> Homo sapiens

<400> 9104

```

gggcaaatag ctaatatttat ttttttcaca tattaaaacc cactaaaaat aaccattttt 60
ctaactaacc acaataaaaa ttagtganaa aagtactgct gctttacatt tctccaaatc 120
tcttcaatgt ctgatgacag acnaaagctg gaatcttgta tctgcttttg cattcagcct 180
attacaatat cacaccanatt agcctcttga aaactcctct gcatactcat gaaaaaatga 240
gtgaaaaana taaatgatgg ctgggcgttg tggctcatac ctgtaatccc agcacttttg 300
gaggctgana tgggcagatc acttgagctc aggagttcca gaccagcctg gccaacatgg 360
tgaaaccccg tctccactaa aaatacaaaa attaccangt gtggtggtgg gtgcctataa 420
tcccanctac tcngggaanc tgaagtagaa aaatgcttga acccagttgg gggaagntgc 480
at 482

```

<210> 9105

<211> 530

<212> DNA

<213> Homo sapiens

<400> 9105

```

aataaagaca aagtcttgct atgttgccca agcttgtctc aaactcctgg tctcaagcaa 60
tccttctgcc ctggccctcc caaagttctg ggtattacag gtgtgagcca gcactcctgg 120
cccatcacag tcttaaaacc aaaagttctg tgtccgagga aaaccangag tgattggtca 180
ctctatttat gactcatagc acttacaggc tacttcggca gggacttggg gtacccctgt 240
tcttgatgg cacatcatta tcagcaacag gaacagttct ctgancctg gccctggag 300
aatctctagc ttagctattt tagacttggg gtcaaaaaaa aaaaacctct tgcccaactc 360
agcaacacca gacaggggcc tcatatcttg gctcgtggaa agtactttta taccaanccc 420

```

tctcctaagg gcataagaac caacattccc attctgggga aanaaaaagc agtnccccctt 480  
ggacccaagt actgggtcct gccgggaatc ctcccccccc aggggcnnngn 530

<210> 9106

<211> 511

<212> DNA

<213> Homo sapiens

<400> 9106

gagacggagt ctcgccatgt cacctaagct gaagtgctgt ggcacaatct anggtcactg 60  
caaccttcac ctcttaggtt caagcgattc ttctgccttc ccctcccaag taggtgggac 120  
tacagccact acgcctggct aatttttttt gttttttag ttttagtaaa nacagggttt 180  
caccatgttg gccaggctgg tctcgaattc ttgagctcaa ctgatctgcc tgcctcagcc 240  
ttccaaagtg ctgggattat aggcataaag ccactgcgcc tggctaanat aatttctttt 300  
tatattagtt gagggtcata aaacaaagtg aatgcttatt aaagangtag aaaaaataaa 360  
gtcattaatg cacacagagg ctgaagattg tgattttata naaatgtaag tcataatang 420  
aatgattatt actaacttcc tangtatacc aacataccag tgcttacaga tttcttacta 480  
antcntgcct gttgtttttac cnccggtacc c 511

<210> 9107

<211> 535

<212> DNA

<213> Homo sapiens

<400> 9107

gagttggagt ttcgctcttg ttgcccaggc tggantgcaa tggcgcaatc ttggcttact 60  
gcaacctcca cctcccaggt tcaagtgatt ctctgcctc agcctccgga gtagctggga 120  
ttacagacat gcaccaccac gccagctaa ttactgtatt ttttagtaaa nacagggttt 180  
caccatgttg gccaggcggg ttttgaactc ccgatctcag gtgatccgcc caccttggcc 240

tcccaaagtg ctgggattac aggcatgagc caccgcaccc ggcctatfff ttcttaatta 300  
 catatgtaaa catatgtgtt ttctaaatac atatagtatg tatgtatgct gtatctgtat 360  
 ttctatctac acgtatactc aatttggtat tcggaaactc tatctacatt ttgatcagtt 420  
 ctatgttatt aaataattgg ctgctgtccc taaaccaaaa tataaggtaa aaaaccgaaa 480  
 aaaaaatntt taactnccgn aaaaaacaac ttttttaatt ttgacnctn ccaat 535

<210> 9108

<211> 543

<212> DNA

<213> Homo sapiens

<400> 9108

atttatccag tctttattat tgaaacactg catttccaaa ccacaacctt atttatccag 60  
 tctttattat tgaaacactg catttccaaa ccacaacctt atttatccag tctttattat 120  
 tgaaacactg catttccaaa ccacagtggg ttctactaac aaagtgtcta cacttcattt 180  
 ctccattaat tacaacatt tcagggtaat tacacttaac actttatfff gtatcagctg 240  
 accctacca caatgcaggg aggtaggcca tcatgccctc tattgtfff cccctaaag 300  
 gagaaagctg anaaacaagt ttttgcaat tatacaaata ttggtgaaa ttcagaccaa 360  
 atctgagagg actactgatg agttctttc actatagaca ttattctat ccaagaaatg 420  
 gggaaaaaag gagaatggaa gatttcttc ctgctttaat tggacaattg aaatacnaga 480  
 atgntgacct aaaataccn caaaattgtt tgaaaaattt aaaatttctt ttttncccc 540  
 cgn 543

<210> 9109

<211> 434

<212> DNA

<213> Homo sapiens

<400> 9109

gagaactgtt aattgattac tttatttcat ataaaagtta cattgaaana anangttgaa 60  
 aagtcaagta tacttgattt gcacacactt gccaaagtctc acaggattca accacttgga 120  
 taattgtttt attgataaca ggatatacat attaaaagcc tcacactgaa gcccacacgc 180  
 atgtccaacc cagacaacaa tgtgcaaagt aatatgcana acaatctcgg aaactggcgt 240  
 ctccagnatc acccacactt tgtccctctg gctgtgacgc agctcttccc ccaacggcgc 300  
 acacgcttct gcggtgacca agtccacttc caaaccacct gcaggtttgc tcgcttggct 360  
 aggacggtgg ctangtang tccctttgtg gttttgcac ancagtggta aaacctgat 420  
 tcngatgggg tnca 434

<210> 9110

<211> 546

<212> DNA

<213> Homo sapiens

<400> 9110

acattattgc acagagattt ctcatcaatg ttcttcagtt tttatgtctt ttcctaaatg 60  
 tgaataagt ctatggataa aatacaaatg tagaaaataa cagcagcatg atttgtcaaa 120  
 gttaatccct ataatttagt aagaaaaaat ggatataaac aaaataagt ctctttctaa 180  
 actgtactaa attttcaaaa atattgtttt aatgcagtga aggtcctgaa aagcctattg 240  
 aaagcgatgc tgagtcctgt tttcaaaagt gtcctgtttg ggttttcttg gtgaananca 300  
 gaatttcaag tgaagtaatc gacggactaa tttaaaacaa aacagccctc ggcttcccta 360  
 ttggcctgtg agggcaccgg ctccgggacc ctgacctggg aggcancgaa tgggtgggggt 420  
 gcctggcccc catctacag tacacaggct ggcagccttc catctgatcc accanacag 480  
 aactttctaa tcttaactcc cnaccgtna aactctgccc ctnaaagntt ttggctccaa 540  
 aggggt 546

<210> 9111

<211> 435

<212> DNA

<213> Homo sapiens

<400> 9111

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ctgagagcag aggctttatt tacaatgaca ttcaaacagg atttagcaaa ggatgcctct 60
tcctgctcgc atcttancag catgggttgt acttcataaa cagaaaagag aaatatacctg 120
ggagcaggaa gtgaactctt ttctcagata atgttctcta aatcccaaca cgttccatgc 180
tcccggctct tancaggtag ttggtggaca ctiggttata gcagctgggt gccanatgcc 240
tgcattctac tgaggaatgt gttcaggga aatgtcnaca ctggccggga aaagcatcag 300
gctttcacct cactcatggc ctccataagg cgaacgctgt ttgttgactg ctgtcgtcca 360
ggaaaatnaa cctgtttcct ttctctctgc ccaggaaacc ggnaggntga natctcnaaa 420
attcacccc ccca 435

```

<210> 9112

<211> 552

<212> DNA

<213> Homo sapiens

<400> 9112

```

gaaccttttt ttttcaggta taaacattca ttcaatccaa taaagacatt ttagaaaaaa 60
gtcaacctat acaattttatt ttatttttcc tataccttgg ctaaacaaaa tatatttggt 120
gatactgtaa aatactaagc attttcagta aaactggcaa tcaaatacag cttaaccttc 180
ttctgcgtga caactgagga ttttaattgg aaaagtatta tagtctataa acaggaatac 240
ccaaaacata ttttaaccac tcgagcactt tgatttttcc atgttctttg catctagatt 300
gaaacacatc acaggaaatt tcaaagacca acggctgaat atttttcatt tcaacatttc 360
cagtggcatc ctacaagaga actagcactc acaatgaagt catctgaatt ttctttaaat 420
cgtaactcat ttttaatttc taaacaggtt tggcctattg atttaaataa nanaattatt 480
atttccataa aatgaattta ggtccnttga aatttccgtt tgaaatctta tccaatacct 540
tanttcccgn ca 552

```



<210> 9113

<211> 320

<212> DNA

<213> Homo sapiens

<400> 9113

```

gctgttagtg tttatttgaa gtgactttga aggactgata atattatggg gcaggcagac   60
tctcactatc ttaagggtgg tgcctgagc cttcttaaag tggtagccca ggccgggcgc   120
gggtggctcac gcctgtaatc ccancacttt gggaagccaa ggcaggtgga tcacctgagg   180
tcaggaattc nanaccagcc tggccaacct ggtgaaaccc tgtctctact aaaaatacaa   240
caacaattan ccgggcgtgg tggtaggcgt ctgcaattcc agctactcgg gangctaaan   300
canganaatc acttgaaccc                                     320
    
```

<210> 9114

<211> 392

<212> DNA

<213> Homo sapiens

<400> 9114

```

gtcagacaaa aatttaactt tttatganat ttcagttttt gaaatacaca actcttacag   60
cacaaacaca gtattttacat ttcaagttct ttgtacaaaa natgtatgcc attttggaan   120
aatattgttg anatcatgat ctaaaatacc tgtcanantt actcatggaa tctgctcttc   180
acaaatccat tgtattatga cataaaatat ggctagacgc caaggtttaa ccatacataa   240
aaatactaata tctcggctgg gtgcactggc ttatgcctgt aatctcagca ctttgggang   300
caaangcagg tggatcacct gaggtcagga gttcaanana agcctgacca atatggtgga   360
aacccccgct tctactaaaa atacnaaaat ta                                     392
    
```

<210> 9115

<211> 302

<212> DNA

<213> Homo sapiens

<400> 9115

```
ctacaaataa agtgttttat ttacaggagt tgtctctcca ggtcccagct ccctgccacc 60
cccaccccag ccccaggag aagaaggcgg atgccagagg agctggcaga ggctgggcag 120
gtcctgagtg ggccaggcta ggccaagaga gaaggcacga ggccctgggc gccccantcc 180
cagggcagaa gccaggcctg cctggagaag gcagcacggg gtcagctctc aggggtcagg 240
ctgggttcca cgccgccgca gctctgctca taanacagtg gggcctctgc gggaanaaan 300
ca 302
```

<210> 9116

<211> 491

<212> DNA

<213> Homo sapiens

<400> 9116

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aggaaaaatg aaactttatt actacaaaca tgagagctgc atacattcta aatcaaattgg 60
ttgcaactta taataccaag aattaaatgt gaatcctact taagaatatg ctgagctggc 120
cangtgtggt ggctcacgcc tgtaatccta gcactttcag gctgaggcag atggatcgcc 180
tgaggtcagg agtttgagac cagtgtggcc aacgtggtga aacccatct ctactaaaaa 240
tacaaaaatt agctgggtat ggtggtacac gcctgtaatc ccagctactt gggaggctga 300
agcagganca ttgcttgaac ccgggangcg gangttgcan tgagcccaa tcgcgccacc 360
gcactacagc ctgggtgaca agggcgaaac tctgtctcat ctaaaaaaaa aatatgctga 420
tcnngtcntt ttgaattaaa ctctccctgt gatatactgt tctctatncc atttcaaaaa 480
tnangctggg c 491
```

<210> 9117

<211> 546

<212> DNA

<213> Homo sapiens

<400> 9117

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cagggtcttc tgtagctttt gtatctcatt ttgaagttgg gtactttcac cttggcatct 60
ctccttttagt actcgggcct gttcctgaag tttagtagtg agggctcttct cttgctcttc 120
cagcaactgg gccctctccc tctccatctt ctcagtcaat tgtttcacat gttcttgata 180
actcttctct tttctttcca tcatctgctg atactttatt tgcatttctt ccaccatttt 240
tgctgaagcc tgtgcanatt cagcttttac acattccact tcaatctctt tttccttttc 300
tgtgagaatc tggctctgtct gtaaaattgc atcggtcaca gactccttgg atttcaagta 360
tgtctgcaga atctcttcag cctgtatccc cttccttggg tcctcataat actttttctc 420
cagtcttgta cttcctgaat aaaaaaaaaa aaaccccccg gtttccaaaa aattcccgnc 480
ctccattcct cctcctnaag aatgaaaatt gaactgaaat taanctnaac aacaattgaa 540
aaanct 546

```

<210> 9118

<211> 508

<212> DNA

<213> Homo sapiens

<400> 9118

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cctgcaaagt acctttaatg tgtttaaatc agcagcaagc attangacat gctattttgg 60
ccccataagt taggtgtgta gcactacaca ttagacacca agtcatccca accaatattt 120
atccatatga acagataaac tgaacaaaaa catagttctg ataaaacctg cattcacaac 180
ctaagttagt ttaaagtaaa ttttttcaca attgagggtc gctattttagg actgttttgt 240
taataataaa aacaggaatt atatanaaga taaaacacca ttttttactg ctatataatg 300
tcttgctata taaaacatac cctcaacaag tcaaaatatt taaaaccagt gtttcaaata 360
ccaaaaatca cagctatgtt actgttcagt aactccactc aaataaatgt tagtactgca 420
ttcttgaaag gaaaaaaact gcanccaagg caagaactct naattttgcn cccaattttt 480

```

aaaaaaanaa anccccctcc tgcaactg

508

<210> 9119

<211> 445

<212> DNA

<213> Homo sapiens

<400> 9119

gagacggagt ctcgctctgt cgcccaggct ggagtgcagt ggcgtgatct cggctcactg	60
caagctctgc ctcccgggct catgccattc tcctgcctca gcctcccaag tagctgggac	120
tataggttcc cgccaccacg cccggctaata ttttttgtat tgtagtana gacgggggtt	180
caccatgttg gtcaggatgg tctcgatctc ctgactttgt gatctgcca cctcagcctc	240
ccaaagtgtt gggattacag gcgtgagcca ccgcgccag ctgcacactg tatcattttc	300
atttctctcc cttgctgtcc cctctgcctc tgctccttgc tcccatcata tggacacact	360
gtgcctgaca cacacgtca cataatctct ccttttttgt tccctagct actcatcaac	420
ctcangtttt gcgggannaa aactt	445

<210> 9120

<211> 263

<212> DNA

<213> Homo sapiens

<400> 9120

gtacgaaact gagattttta ctgacatgca gatgtgcttt agagttaatg tttctacaaa	60
aagtttctat aaacaataga aaatttctag catgaagtca caggatgtta aaaatattac	120
aatgcaataa atacaactac atcctccaca gcccacaacca gacaggaata ggcagctatc	180
aggtttggag ggaaacactc ttgagatcgc cttcacgac cagagaaacc cagancacca	240
cncaggaaga nggaacnacc cna	263

<210> 9121

<211> 341

<212> DNA

<213> Homo sapiens

<400> 9121

```

gggagtactt tcacgtttta tacgcaaggg cataaaatag aatgttagga aacaatttgg 60
atttttttcc ctaaaatata ggtgactatg ggctagttta caactttcct tctctcactg 120
aaataaaaaat acatagttaa ggaatagga cgaatacata acaggtgaca ttgacagtt 180
tgggcatatt ccttgttact ttctaattctt ganaatcaca gtttgctgtt ttagaggtat 240
ctganangtt ccanataaaa ggcgatggct aaatgctctt aaactttgaa ccgtgctgga 300
tgctcttaag ttaggaaaan gaaatttata accnaaacct t 341

```

<210> 9122

<211> 503

<212> DNA

<213> Homo sapiens

<400> 9122

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ggtaataaga ttaattttc cagtagcctg catgaattgt tcccacataa aactgtacag 60
ttagtgactg aattgtatac ttaagtcca gtattttaca ttagtgagac tgaaattaga 120
ggtaaatttc ttaacaagt gtaaggctta cctatttata aagaattatt ctgtagtgt 180
ttaagaaaaa cagatctaga gacaatccag taggctgcat tgtaaacatt atgattataa 240
atctcttagt actgccatta ttattgacag ttttgtaaan acttgtaaaa agtccagttt 300
ctcaggaata tgaaaattat cttcagaaac ctgggtgggg cctttctcca attcctccag 360
ccagctgaaa tactgccaag ctacttcat gttgcaaggt gatctgcact ttcttgtgag 420
tcgcttctgc atatactcgg acaanatctt ctgttncaga agggcggaca aaactcnaa 480
aaanctgttc ttctccccag ttc 503

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<210> 9123

<211> 553

<212> DNA

<213> Homo sapiens

<400> 9123

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ggcatgagag atgcaacagg ctttattgtt gcagcaacac taacatatac gccccattcc 60
ctgctgancg ctgtccccac ctcaccctt gggtgtcgat ggtgtggaac attgggggtga 120
ggggtaaaat gcctaagcan aactggaggg angcaaatgg gactgggtgag ggtcgggatac 180
acctgaacca ggggtccaac agtcaggata cccgactcca tccacacagg ggcatggaac 240
acttgggttc tganttcaaa atttggcaat gtcttgacct gggttggaac gtaggtgggg 300
tctggaaaan ctttgggtcca ggggtcaaaa ttgaaaatg ccttgctcca agccccagtt 360
tggggatgaa catggaaaaa ggtggatggg antgtctctg ggttcacaat ttgaaattgg 420
ccatggatgc tctggcctga accccatttt ggggctggat gtaggtgctc ttggtccnaa 480
gttccaagct ggggaaaanc ctttcccaag ttattggggc tggntttaaa ganatcctaa 540
ttttgggcct gnc 553

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<210> 9124

<211> 544

<212> DNA

<213> Homo sapiens

<400> 9124

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cgttntttt ttttttaaac aattgattta aatccatgtc attttacttt atatgtactg 60
gtctctcatc tgactttang cgttttctgc gggngtgtat aaagtctcat cagaatcctc 120
agttacctcc accatcatcc tcttcctgct caaactctgg caaagggtcg aanggtcccg 180
tctgaataaa tctctgtgan tttatcttcn aaagtacaat gcaactgctt tccctgcctg 240
agctacttct gaatcagcct tcaaattaat ctcttggtgtg tctgcataaa cttgaacaac 300
tttcatcatt tcattaaacc ttccacagtt cttgaanatc aaacggacat cggccacaaa 360

```

ntcatccggg atttggtaat gttgggaatg ttttttctga ancttctttt tcncggggga 420  
naaatccatt gggttcttta taattttata ataatttggt atcnaacaag aaaaggcccc 480  
ggaaatccat acttanticct ggcaataaaa ggtaaacca aaaaattcnn ctttccttn 540  
ggcc 544

<210> 9125

<211> 449

<212> DNA

<213> Homo sapiens

<400> 9125

actgagaggt aactttttat caatcaaacc acatacccca atttaacacc tttcagtgt 60  
ctgaattcaa ctgacagact aaagggtgtt tcctgtaaca gtctgaaata ttaagtgtt 120  
ttttgtttt gtttttaa at cttatttcan aaaacttcct cttggggtag gaaagtacac 180  
atgaagcanc aaagtaacga aaaaaaactt aaatagggcc ttcaganatc ccacacacta 240  
caaagattct gccaaagccat aanataagt tgaagcccag tatatgtcca gcttttctcc 300  
tcaggacatc ttcagtgttt cttctctttt aaacaccaca tcaggttcta gccacanact 360  
tgtgttttgg gtgtgcctgc tttganggggt ccatgccc an tgtgtctgct ggtgaccaag 420  
accancagta atgantaacg ggcgccttc 449

<210> 9126

<211> 449

<212> DNA

<213> Homo sapiens

<400> 9126

ctttctttct ttttttgtgg gtacaacaac ctgtagccac atgagccgta tctacccagg 60  
anattccttg ccagattgga acatggagat gaacaaagct gcttctggga agcccatttg 120  
gaaaaaaaag anggaactan aaagctgcca agtcaagctt ttgaagcgga nacaaagtca 180

aaagtttaga cctccctccc aatgctgggg atgggctgac tgtttaacca tgtgcacacc 240  
 aacccagtgc acaccaggta cagtgtgaca ggggtggctat ggcctaaaac atgggttttg 300  
 caggcaggct gacgtgcatt caaattctga ctcttctga ccacacaaca tggggctggg 360  
 gatcttgact cttnaacct gtttctttgc anaaaaaaan ggggcaataa taataccccc 420  
 tcttaagggtg gantganaat tactttgca 449

<210> 9127

<211> 501

<212> DNA

<213> Homo sapiens

<400> 9127

acacttttac agtttaagaa atattaaatg tgataactgt tcaggatcta ctttttacac 60  
 aatctcagta acgtatgtac atagtcccaa aaaaaaaaaa gcagcatttg cctgggaaca 120  
 catcactata agcaaacaaa acatcaaagtg gctgaattc taaaatacct ttggattata 180  
 taaaattaca ttgtaaagtt acaaagtttg ctcatcttg anaaatgttt gaatgtttaa 240  
 ataatgttgc cataatacat attatttcac gacattaaaa aaacaatgg tgaatacaag 300  
 gtatcatcat ttttaagggtg aagagataaa gcaagtacat atacaaatcc actggaaaag 360  
 ctaagtttgg agctgatttc ctctcttgaa ttgtaaaatt tcagtaatac acagtcacta 420  
 tctactgctg gaataatgcc tgagcaattt aggttganga tacnaacnat aacaaaaacc 480  
 tgcccnata ttcaacttgg g 501

<210> 9128

<211> 460

<212> DNA

<213> Homo sapiens

<400> 9128

aggtttctaa aatgaatgtt atttgatttc atcatatatt aacagatttt agtaagttgt 60



ttttaaacta gaggaattga ggcagagaga aatgaagtcc ttttactgga aattttcatc 120  
 tcttaatgtg ttaattgatt gattttttaca catttcattt taaacatgga aatgatgaag 180  
 gttctaattg taatgagtag ttgtttttgg attgttcagg tacactgcct cttttcttca 240  
 gacactgggg ctctttttgtg gtcactgagt attactgttt tttcaagtct tcaagcacat 300  
 cttgctttgt gatttttgcc catgcattgg ggattttacc tttacctgca aattttttct 360  
 gatattttnc ttcnanattt gatctgaagt gaganacaaa ccatttccag tatanctgga 420  
 tggaagtatc tggggtgatg ctccacatgg cataatcccc 460

<210> 9129

<211> 479

<212> DNA

<213> Homo sapiens

<400> 9129

cttgtgaaat cattgctttt aatcttttaa tctatccatc tttaaaaaga ccctaaagga 60  
 ggggtctttt tgtccaggaa gaacaataaa aggctgtgga aatacatcca gaatatacaa 120  
 ctaaatacaa aaccaaagc agcactgaat gggcaagaga aagatatttg cggaggataa 180  
 aatggggaaa acacatcaaa atactaaggt taaaatttct ctaattaggc agatataaaa 240  
 tgacactgat gaggggtatat gatagccata ctcccaacaa ccaaagttat aaagcaatac 300  
 gtgctcccca aataacaagg aaaagaattc tttctattcc ttttgttccc cgccccatcc 360  
 cttgaatatt aagcatgaac actgtacatg cataaatcnc ttttacaagg gccacncgat 420  
 nanatcacac aaagtctcat ttccccaaaa ataaattctg ggtcgtgggc nccttacca 479

<210> 9130

<211> 601

<212> DNA

<213> Homo sapiens

<400> 9130

aaaaggcaaa caactttaat ggttattttg ctaaagataa aactctgggt ggtaaaggaa 60  
 ttaaaggcag antctcaaag agatatttgc acccccggtg ctgtattagc actactccca 120  
 atagtcaaga ggaagcaagc caagtgttca ctgatggagg aacagagtgt ggtacgcaca 180  
 tgtaacggaa cattccatta tatgtataat acaggaagga aatcctgtca cctgacacaa 240  
 catggatgaa ccttgaggac attatgctaa gtgaaataag ccagtcacaa aaagacaagt 300  
 cactgtatga ttccacttat atgagatact gagaatagtc caaaccagag agacagaaaag 360  
 canaatgggtg gctgcggggg ctgggaagaa tgggaattac tgtttaatgg gtacagtttc 420  
 cattttacaa gctgaaaacc tatggaaatg gacggcgggtg acngccnccc acattatgaa 480  
 tgttttaaca ttaactttct gaactgtccc ttaaaattgt gaaaacatat ttttttinnat 540  
 ttttttcaac aatttinaatt tttagaaaaa aacccaaccc cccnggggtt ttggcccttc 600  
 c 601

<210> 9131

<211> 512

<212> DNA

<213> Homo sapiens

<400> 9131

aatgctgcat ttcttggttt tatttgaaac agtgcataatt ttttagcattt tatggtagga 60  
 ttttacactt gtcatttaca caaattacaa ggttctgctt caagttttta aaaaaaattt 120  
 aaaaattcag cccatgtgca gcacaaaaat atgcaaaact actttacatt atacacactt 180  
 tttatcaaag gaaatacaaa attctggctt gttgttttaa acaaatacaa naagcttcaa 240  
 actaaacaca aagggttaac attaattctc aaatataagt ctgcactttt gtgtttagt 300  
 tctctgaaat gtgaatacca aattcctaag ggattttaat gttttccttt gaaaaggaaa 360  
 actaaaaaaaa ttcccgtaaa caantccctc cccatcagct tggcttttcc caaccctact 420  
 cttaggttccc ttaatgccan anacttgcac catgtttacaa aattgggggt gggcccttaa 480  
 tentacaagg aacaaatccc ttttaacttcn cn 512

<210> 9132

<211> 454

<212> DNA

<213> Homo sapiens

<400> 9132

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gttttgcaac caccatcaa taaactttct tttttattat taattggggg cagggtttct   60
gttcttgcaa ctgagtccta acagaaaaca atggtttcgc tgaccacacg gagagctgag  120
gacaggacaa aaaggcatga gacagctgga cacctggaga gaggtgacac aggacagagt  180
cctcaccggg ctgccctggg cctcggggag ctcaggctgc agtccctggg cctggtggca  240
cccacagcac ggcagtctct ggctgggctt cggggagccc acatgtctga tcggcaaggc  300
ttggctggcc aggcggtggg caccaacgtg gtgggtgggc agtcctgggc ttccaggagg  360
cctcctggga ctcaagctct tcagtggggt gtgcctgtca nggtgcangt gggttctgtg  420
gctacactcc catcctgtct tccctctgtg tncc                               454

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<210> 9133

<211> 502

<212> DNA

<213> Homo sapiens

<400> 9133

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ggacaattgt gaacgttggt gtccattct tttttctcc aatttcttct gcttttcacg   60
ttccattttt tcaagacctt cgcgaatcca agcgggaaga ntctgcgtt ttactgcgtc  120
aatttgtgga ngctcctgct tcacaggaag tgcaataggt gaacgctgac gatccctgaa  180
tgatgatggc ctttctcttc gattctgggg angtgctgga ngtcctggan gtcctggttg  240
ccaataagga ggatgaaatc caccttgagg tggacaaaa gcagcccat gctgatagtc  300
aaactgggtc actggcccca ctgcaaaatt atcgggtggt ccaccaaagt tgtgattggt  360
ctggttaaat atatgcctgt tgcaggggc aaattcccca ctgtcctgac tgttgctgtc  420
ttcanaaagt ggaacaatgt ccattgggcc tgggtgtngt ggcatccatg gcttaatctt  480
gaaggggggt ttttnggnt cn                               502

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<210> 9134

<211> 508

<212> DNA

<213> Homo sapiens

<400> 9134

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aagtttattg tatatttatt gtaaattgtg tgcattattg attagtctgc ccaggactgc   60
cataacaaaa tacttcagat tgggtgggtt aaacaacaga aacttgtctt ttcacagttc  120
tgttttctgg aagtcccaga tcaaggtgct ggtccgtgtg atttctgggg agggctctcc  180
ttggcttgcc gatggcctcc ttctctgggt cangcacggg gggagagcaa gcganccct   240
tgcgtctcct ctcanaaaga cnaatcctgt tggatgaggg cccaccctc aggaccgatg  300
taaccttaat gacttctgta gaggcccat ctccaaatac agacatgctg cagttaggtc  360
ttcagcattt gttctttaat anaattttca atgccagctt gcaccattaa gtcattgaca  420
ttcttctgta aatcctcaat gnaattccc atttcttccc attacantgt ttaagggcnc  480
ctgcttnaaa ctggaatcca aaaccncc                                     508

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<210> 9135

<211> 498

<212> DNA

<213> Homo sapiens

<400> 9135

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attagtaaga gagtttattt ggggattaat acataactaat ttattttatg tgtagcaaac   60
agaatccacg ctagctttta tgtaattaat tctctttgtt tccaagtata gatccctcat  120
gttttcctca catgatctct ctgtgacaca tttctcccct ctgacaggcc taccatgacc  180
ccatgttaaa gttgtccatc atgtcagaag angaactcac acatatattt ggtgatctgg  240
actcttacat acctctgcat gaaggtaga tgtgccactt aattgtcatt aaatctaaag  300
ancagcgggt catgtaattt tcagtctaaa cttctaattgt agtgctgacc tatttttta  360

```

ataaacctgt taatgggtgt tatgcttttt taccattca gatttggtga caagaatagg 420  
 aaaancnacc canctgatg gaacagtgga acaaattggc ccattctcct ganctgggtt 480  
 tntttgaatt tttgaccc 498

<210> 9136

<211> 467

<212> DNA

<213> Homo sapiens

<400> 9136

gttcctctac ttttaagctgt ttgtcaatc gggctattaa ctgggatttt aatccttttg 60  
 gaactaagan ctgcactttc taattctttt cggaggtcat ttaccttcat tgtcttttga 120  
 tcaagtttag accaatgggt atgtgtaaaa atttcttttag cttcaccatc atccttctct 180  
 tcttcatect gttctccatc agcctccttg cgttcaccct gaagcttctc gaccagctgc 240  
 tgcttgatc ctgggganan gggttccac tctganeggg tgggaangca atgccaaaca 300  
 tccgggaaaa ataaaaccac tgtctccaca tgagctggaa ctgtacgcc cttgtgggtc 360  
 tcctcacggc gatggtacga atctctgcaa aacggtacca ttgtttgcac cacttaaatn 420  
 aatgcctgtt caaaaccttc aacancaaat anctctttt tcnccc 467

<210> 9137

<211> 503

<212> DNA

<213> Homo sapiens

<400> 9137

aggttaaaa tagattttta ttttattaaa aatataattt aatgcagggt gtttgaagca 60  
 tctgtcttca tatgaaggca ttagaacacc ttggtataat aaaaagttac cgtaatttat 120  
 gattatttga atttatccat tctgaaaatt aataanatct aaaactggca tgacaatcaa 180  
 natttgtatt tagtgaaatt taaaataaat gtnagccata gttaaaactg ttgctgcatt 240

catgaatgcc cttaggaaaa ggtccacagt aaaatcagaa agctgaacct ctctgctgt 300  
 ttataggata tgtttatgct gaattaattg ccagggtttc ttaaactttt agggaattat 360  
 actttggtgg ctcnatagta aattctacaa attattttta aattgatttc ctttccttan 420  
 anctgcanga aaatatctgg caaggtgcat ttaatatattg gaaaaaaaaan atgaacngtt 480  
 acctacttta ggaaaaaaaaat aac 503

<210> 9138

<211> 468

<212> DNA

<213> Homo sapiens

<400> 9138

acaaagcagt tggggcattt attgacattt aaacaagggg aggagatcct gaacactagt 60  
 ctgctcagt ttataaaaac ttgaggccaa actctccatc atctgtacac agcttaacca 120  
 cggncaggan caagaattcn agttaaacga attgaaccag tccaaccaca anacnataaa 180  
 gggaaacagg gcgtggggat ttccagtttt tcctttttaca ttacaaagtt tccaacacaa 240  
 gaagccaaca ataccccagt gctgcaccaa gttacttccc actgtttccc nagnnacagt 300  
 caattaataa tcagtagtcc aagttctaan aacatttcct ggaaaacaag gacgcacctc 360  
 ccgtggctct atgcatggcc tgccactgat gaatcaaatt cttagaacc tacgaacgtc 420  
 tgataccttg aaganaacnc cccctaaaa tctcnnecat ccnggcc 468

<210> 9139

<211> 435

<212> DNA

<213> Homo sapiens

<400> 9139

aaaaaaaaa attttttatt aagtgtgaaa gcaaacagg tacatctatt taaatatttt 60  
 ttacatattt atagatacaa caagacaaa taacttagca aaaattacaa gtttaaagaa 120

tagtactatt ttgaaacagc caatatagta tctgaaaata ttccatttta tccataatca 180  
 gtgagtatta tttccaaaaa aagtaacttg cattttcttg tgaaaaatat ggtttttttt 240  
 ttanatgtct gccaaaggatt tatcanaaaa gtccatcttt ctaaacctaa aaaattgtaa 300  
 tgcctttatt gaaaactttt tttacctaat ggcttttaaaa accacgtggtt ttcctttgga 360  
 cttaggtgaa ttctaaatct ttacttcact ttcaaactac agggnatcga cattaacnaa 420  
 aacnaatcnn attga 435

<210> 9140

<211> 427

<212> DNA

<213> Homo sapiens

<400> 9140

atctgtgaga gattaaatat aaggactggt tttgttggtt gagacaggat ctggctctgt 60  
 tgcccangca acagttgtgc agtgatacaa tcttggtca ctgaaacctc tacctcttgg 120  
 gctcaggcaa tcttcccacg gctcactgaa acctctacct cttgggtca ggcaatcttc 180  
 ccacggctca ctgaaacctc tacctcttgg gctcaggcaa tcttcccacc tcagtttctt 240  
 aagcagctgg gactacaggc gtgcaccacc acacctggct agtttttata tttttggtta 300  
 aaataaagtt tcgccacatt acccaggctg atctcaaact cccaagctca aaggatccac 360  
 ccncctgaaa tctcccaaaa tgctgggaat aacaggtttt aaccaactnt tcctggccaa 420  
 ggttnnn 427

<210> 9141

<211> 399

<212> DNA

<213> Homo sapiens

<400> 9141

ccacaaaaat gtaatatata tttaatagca cattataaag ttcctgacca aagacgttga 60

tttctaatt ataatagcac agaaatcctt tagaatttag taaacgtaat taagactatt 120  
 cagaagtaat gaaaaaccaa tatgataaaa acaaaaatcc tccagtaaag aaggaacctg 180  
 tccatttgag anaaatacaa ttgagaactt gcaaatgana caagggaaga tggcaatttg 240  
 gaactgcaat agaaataact atagcagaaa caaccattta agaagtttta gcagcaataa 300  
 gtatttatta ttctgaatga aatgtncagt tgacttttat ataaaaatcn tcnaagtgct 360  
 atattggatt atttactatt aantttaccc cccaacngc 399

<210> 9142

<211> 490

<212> DNA

<213> Homo sapiens

<400> 9142

ctggagaatt gtacatgttt tattgggaat atattttttc tttctgaatc tgttatgaat 60  
 gcattggttg gctgggttca gtaataaata tgtgagaact ttcatataaa aaaaatacaa 120  
 aaattagctg ggcatggtgg cgcacacctg tagtaccagc tactctggaa gctgangcgg 180  
 ganaattgct tcnacccaaa aagcggangt tgcagtgagc tganatcgcg ccactgcact 240  
 ccagcctgtg tgacagaatg agactttgtc tcaaaaaaca aacaaaacat gcacacattt 300  
 aatcaatata aaatattatt tctgcgaagt cacttcaagc tgatactgca tactccatat 360  
 atgctaaact tcacaangtc tttacctcat acctgantct ctttctgaa cccccgcggg 420  
 ggtaattcaa tnccttgggg gtnccttacc cccttggtag tacaaccttt gggcnccagt 480  
 ncgtttccac 490

<210> 9143

<211> 542

<212> DNA

<213> Homo sapiens

<400> 9143



ccaatggaaa aatctctaaa cctcttagag ttttattaga catttcatgt acagaagtta 60  
 atctagaaaa atacatttta aaaatcttca acagaacatg ctccctgtaa caaaaccttc 120  
 caaacctgt gttttattat acaaagcaat ctacattagt angtaaaaag aaatttctcaa 180  
 atttagcaat gtcattttcc atccaacatc catctaattt acagatgggt ttccactatt 240  
 catactggaa ttagaattct gtaataaatt ttttctaag ttttctgtac atattaaata 300  
 acccaaaagg ttcctcttgt agtgcattgt ccatttagca agtctattca gtatttttcc 360  
 agtaccattc tcattacagt gatttgcctg taaatgtag ttaatatcta aaagtgcaca 420  
 cagttaactt tcccaaataa cggactatct ctgggaggaa acctaataatt cacagaaaaa 480  
 gattaccant aacaatgaat tanaaaatnt ngggttgaaa gttctcctga aaaacatcca 540  
 cn 542

<210> 9144

<211> 297

<212> DNA

<213> Homo sapiens

<400> 9144

ggctcttact tgtttctgtc tccttttcac agggaacact tccacagggt ggggaacctc 60  
 ccccatgggt aacatgggtca gggctgcctc aaatctggag gctagactta gcactacatc 120  
 aganctgtgc cacttcacac tgacaggcag tgtttaanaa aaacatctca acctgccagc 180  
 caacgaaaat gggtgacaag tcanaatgtg gggcagggat gtnttaaagt gaacagaant 240  
 gctaacaaat gcctcctcaa gctgtaanan tcacatgggg agacagtggc aatgtgt 297

<210> 9145

<211> 284

<212> DNA

<213> Homo sapiens

<400> 9145

aaatactaga aaggccataa tgaacttaaa ggactgattt gggtttaata gtaagggatg 60  
gcttgagtta ncaatgaatt aagggaagac tantgttaaa acaaaaaaaaa accaaaaaacc 120  
acattcaacg aattgaagat actcaagaaa acctgcagaa aataatatga aaattaaggg 180  
gaaacctgan tgtgttttaa ggcanatta aataaagctt atgttttatg gttganaganag 240  
tcagactaat aaacaggctg tttcanacct aagttaggca ctt 284

<210> 9146

<211> 352

<212> DNA

<213> Homo sapiens

<400> 9146

cttttttttt tttgtctttt aaaaacatcg taacattaac acatggccgt tcaccgtccc 60  
ccagcgatgg gagctggcct ggggccagg gtcctccagg atcttcactc attcacagta 120  
acggttctga ccagtcctcc aggtcgcacg tggatgccac aggggtgggg aaggaagaag 180  
aaattactnt cccaccttca naaaaaaaaa aaaaacaaac aaacaaacnc tgctanccac 240  
tcacctttaa aaaccccatg gctatgggcg cctgcancgg gcgggggtcc atttgcttgt 300  
tcttnatac aaaaangcag aaaatcccc cttaccaaac attnnaaatc ct 352

<210> 9147

<211> 221

<212> DNA

<213> Homo sapiens

<400> 9147

gtttgttagt tancctggcc tcanatcagt ccctctatct ctggtctaatt gttgtaactt 60  
ctttttctct tgggtatntt aggccatgta tntggaaatt ngatgcatgt gaccccctat 120  
ggcacagtct gacatttctc aaattcacct canttccat ctctggttct ggaaattatg 180  
aantcagana gccccatgaa ggcttaagtn tacnggcac a 221

<210> 9148

<211> 455

<212> DNA

<213> Homo sapiens

<400> 9148

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ggaanaaaac atttgcaa attttatctg atgagggttt aatatccaga aaatataaag   60
aactcctaca actcaacagc aaaaaaagac aaccaacta aaaaatgggc aaaaatgtga  120
ataaatatatt tcccaaaatg acataaaaat ggtcaataag catgtgaaag gattctcaac  180
atcattaatc attagggaaa tgcaaatcaa aaccaaactg aaatactgct ttacacctcc  240
tatgatcagt ataattttta aaaacagaaa aataaaagca ttggtgagaa tatggataaa  300
ctggaaccct actggaaatg tataattgtg cagtcattgt ggaaagggtt ggcagttcct  360
cnaaaagcta aatanaatta ccatatgttc ttggccttcc tccncctana taatactccc  420
agaaaaaaa aaaaaagggt tttnaacaaa aactt                                455

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<210> 9149

<211> 392

<212> DNA

<213> Homo sapiens

<400> 9149

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aacaatgtaa atgattta atgtcacctga gtggtgtatt tgaggagtac aggtttcctt   60
gtaggatttt tttttaaggc atccattgag aaaaaagaaa tgaacactat cagagaagaa  120
tcctgatgga gatactgttt tgggctagag gtattgaaga ccccttaaga taaaaaatgc  180
atgacttggc tcttccctca gagagctcat actaggtgtt caattcacat tggtttctga  240
atggcttgaa aacaatgata tccattctca gagggctgag actggatcta gaattggcac  300
ttcaatgctt ggcagtactt ttgatcttct aatatgccct cttgttttcc anaacaatat  360
tgacaacgat aattcattga aaatttacnt cn                                392

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<210> 9150

<211> 327

<212> DNA

<213> Homo sapiens

<400> 9150

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aangtgtaga gatgcattct cactatgttg cccaggctgg tcttgaactc ctgggnctca   60
agtgatcctc ccgtctttac ctccaangg gttgggatta cagggtgag ccactgcacc  120
cagtcccatt ttacttaa atcaaattca aatcttcagt gtntactta ttttgggtgt  180
taattccatt atacaccgtc ttatttcatt aatttcata ttgtgccaga caagatataa  240
aaataattca actccagnca ataatnccat ctgtcttcat gtgaccagaa taannagctt  300
ctgctcccaa natggaagcc acagtaa                                     327
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<210> 9151

<211> 446

<212> DNA

<213> Homo sapiens

<400> 9151

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gtgaaagggt gttgaatfff gttaaatact tttcctgtgc ctaatgaagt gatcttgtaa   60
attgtaatff aatcttatct attctcatgt ccaaacactc aaganaaaac tataaggaac  120
tatatttaca aaataaatca taactttaca aaaagggc at aaaatagcat tttggcaaaa  180
acttaactta ggtaatctga aggtatctaa ctgtatcaat tttaaaaata taaaaatata  240
gctttatgac gaaatfffft ctgattaaaa aagtaaaact tcatttgctg gttataanac  300
aatatgttca tttanaaaaa aagtggacat cctgggctaa catggtgaaa ccccgctctct  360
actgaaaaat acaaaaaatt tanccnggcg tngtggcggg tgcctgtatc ccacctactt  420
gggaagctna agcaggaaaa ttgcnt                                     446
```

<210> 9152

<211> 406

<212> DNA

<213> Homo sapiens

<400> 9152

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aattgcacat ctgttcacag aggttggcaa aagacactgg aagtgattgt gaaatccaca   60
ttgtgattcc tcaggaatca gacccataga gggggtgccc agagctgtcg gcacaccgtc   120
ccaggagtct gcctgtgcag ctcccagcca ggcaagaagc cctgaaggca gagtcccagg   180
tggacacagc tggacgcctc tctgacaatg gtggctctgg tggtaaccc ctcggtgtct   240
cttctgcacc tctcaaggct gcaaagtgcc aaatactctt ttccaaccag ctcccgaatt   300
ccccctcca tctgggactg catgtcctgc ttancgattt caagcaatga tttcaccttt   360
tcatanacaa ggacattgtc ctcatcaggg cttgcaccat cncctc                       406

```

<210> 9153

<211> 550

<212> DNA

<213> Homo sapiens

<400> 9153

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gtatagcttt caggaagcag gaagactttt ctctttttaa atgatagaac ataaatactg   60
aaacaatgac attggaacat ctatccattc ttgtttcggt ggaaagtcta tctaattcag   120
cttctggacc gactgttcgt ttttccatga tctcttcctg caggtttgct agaagtcctt   180
ttccccccat aaacaccttc ctttgggana tttgggtgcc ttcctttttt aaggttttta  240
aaactaaaat gatttataga ctatccgtat cctgtcanag ttgggcaagt gaatggatca   300
tatttgcgtg ggtcactctg attataggac ttcactgttt cttgaactaa aagtgaaga   360
tttattattc tattaatgct cataaagtca ctcttttgat gagccataac ttctctttat   420
gaagantgtg tatgccagtc acctatgata agganaaaaa aatccanact tctaacatat   480
tccctcacat tccctgcaac attaacagtc ttgaaaccct atntaatccc agggganaat   540

```

gccccnggat

550

<210> 9154

<211> 401

<212> DNA

<213> Homo sapiens

<400> 9154

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cagcacaata tttcatttat ttattgtata agtttggcaa acagcacaaa aatccagcaa 60
catttaaaac atataaaaaa gtcaaagtct aaacaggact agggattttt ttttacatca 120
ttagaaataa cgagtacaca ttttaagatt ctgcaaagct agcaaaatga anatgcttgc 180
cttctgaaca tatactacaa acacacatac aaaaaaacia tataatttat ctttacaaaa 240
attacagcca agcaatagaa aagaaggatg ttnatgatga agatagcaac acatatgttt 300
agtacatata tcttacacat tgaaatgcta catcttatac cctgaaatgc catgtgtnta 360
gagccnngca nagtaaattt aggctcntta ctggaggtta a 401
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<210> 9155

<211> 581

<212> DNA

<213> Homo sapiens

<400> 9155

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ctagcaaagt ggttttattct ttcaacttat tgctggaaga agtcctttta acaaaccagt 60
gcanagaaaa tgcctatcaa aagtatcagt ttttcagctt tcttcaccac tgcttttagat 120
gtatcatttt tataatttta tctcttcatt tttttaaaga gctgctactt cagatgacag 180
taactctttg gtgtttattt ttatttccaa gattgtgatt tttttaagag gctactttta 240
ggctgtgaat tgtctcactg tcttttcact ctctcttttt agttcttcaa tatgggcac 300
caagcgctct agaatgtgat gagacctcag ttcctcctct tccaaaaatc tggtagctat 360
tgaaccaagg ggagatacag gcaaggaaca ctcatgtnaa cccaattcca atttcatcac 420
```

catttcagaa agatgacgan tttctaattt gagtgaccca gctgatccaa aatctcctta 480  
 tgctctactg ctttgtcttc tgccttttgc tctctgctct gaatcccttt cctntntga 540  
 agaaaaacct ttggtggaan ccatattgan atcccccca n 581

<210> 9156

<211> 435

<212> DNA

<213> Homo sapiens

<400> 9156

ctcattgtga aagattttct ntntattatc aaatctctgc tatagaaaca ctgaaaaaaaa 60  
 tgggaaaaaaaa aatcactggg anangcagca taaaatgggtg gctgaaaaca anaactctgg 120  
 gagccaatct cagctctact cccttactag ttgtgccccn taggtaggat ccttcaacat 180  
 ctctgcttca actnagccat ttgtaaaact ggggtaacag tacctatctc agagtaaagg 240  
 ggactaaaca agttaacact tggaaagcat ttaaaanaaa gccagcaca taagtgttat 300  
 atgtatttgt aaaacttttt aaaaatctca actgggttaa cttttccatg gatctttcag 360  
 gtccttaccc atatacattt ttttanatgt gttacantaa gtatgtatat acaantctgt 420  
 anccttttta ttcen 435

<210> 9157

<211> 512

<212> DNA

<213> Homo sapiens

<400> 9157

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 gcaacctctg ccttgcagtt caagcaattc tactgcctca gcctctcaag tagctgggac 120  
 tatagacatt caccaccaca ccagctaatt ttttgtatt tttagaaaat tttgtatatt 180  
 tanaaaaggt ttcacatgt tggccaggct ggtcttgcac tcctgacctc aggtgatccg 240

cccacctcag cctcccaaan tgctgggatt acaggcctga nccactgtgc ccancctca 300  
 agtnactctt aaacctactg aagttagaca atcaataact gaaatgacat catctttctt 360  
 gaatgtttta ggaaataaaa ttccttcttc tgacaaactt taaatgtgtt cttganttcc 420  
 ttgcctcccn cttcctctgg gaattttctt ccctanctgc tcnctttcat tatcaanaaa 480  
 atattccctt cccccctttt accttatacc ta 512

<210> 9158

<211> 468

<212> DNA

<213> Homo sapiens

<400> 9158

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 tgacataaat aaacttgagc aaaagtttca agctaganga tatatatgta tagaaaatta 120  
 tatatttgtg tgtgtgtgta aggctcttg gaacagtgcc acaaacctgg acaccaacca 180  
 acanaatcct cccgtccttt gaaatttcca ttaanagcac aatgggggta attataccag 240  
 gatgctccaa tcgctctttc catcttgtgc actcacatgc ccgccaacaa tgaaatgttc 300  
 gcctgctccc ttccaatgtg atggttggtg aacttatctt tagtgtcatt tgataagcct 360  
 ttgtgctcac anaananaca tcccactgac ccagccactg gtcattgtct ataccagttc 420  
 acatcaaagc aggcgctttt gtcaggttcc nctcnaatat ccattccc 468

<210> 9159

<211> 223

<212> DNA

<213> Homo sapiens

<400> 9159

ggtaactgct tctttactac ttgatgtna aaaagtgtta gcttgctacc taaagtaagn 60  
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cagaagatga aaagcagaat cccacggttt tgganttggg gcancggaaa ctacatgaac 180  
tcggantcag gangtccagg gtctancact catctactcc tga 223

<210> 9160

<211> 330

<212> DNA

<213> Homo sapiens

<400> 9160

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acaacattct cttcattaag cctttttcaa aacacacgan acaaagctcc cctttgggtca 120  
agggtgtccca cacattacca ctgcagctcc cagcacagcg gcgcaccatg aactcggacg 180  
tggagcccaa ggaatggaga tcgcaccagc cttccctgct tccccacccc aactacaccc 240  
naggggagaaa ggatacnang aaatacccta tgtcttcaat gcttgggggg ctgggggtgt 300  
cctctgctac caantgggcc ggtcantgcc 330

<210> 9161

<211> 517

<212> DNA

<213> Homo sapiens

<400> 9161

gaagtccaac ctggccatcg ctttatattt ctgcataaga naagcacagt tganatgctg 60  
gcttctggct tcatactgt gctaaagcaa ggcttctttt ttccttatgt tacttttttg 120  
agacaaggct tcactctgtg acccaggatg gagtgtggcc acacaatcat agctcactgc 180  
aaccttgatt tcccaagctc aagtaatcgt cctgcctcag cctccccgagt anctgggatt 240  
acaggcgcac accaccaggc ctgactcttt tttttttcct ccggtanana tggggctctcc 300  
ccatgttgct canactggtt tcaaactcct gagctcaatg atcttcctgc ctcggcctcc 360  
caaagtgctg ggatttcagg tgtgagccac catccccgga acttttcttt tcaaaacata 420

cattaaaatg gaaatgaata ngaacancca gtggctgtga tgcacaaaaa cccctgtctg 480  
gaaacatgcg tctangttat cttcccccct ttgccan 517

<210> 9162

<211> 599

<212> DNA

<213> Homo sapiens

<400> 9162

aagattttat gtaatgttta tttttttaat tcccatccta actttggctt taatccttac 60  
ctctcatttc cattcttttc ttgaaatcc aattaaaaaa aaaaaaaaaa aaacaaagtg 120  
tttaaaatca caattatcta aagtcataat aaaatttnc tgtctccaaa nagggggaaa 180  
acacaccact tttattttta tgcagcattt tcaaataatgc atgtcaatat atattttata 240  
aactatttta aataaaaacc ctncatcctt tgagggttatt gacattttct agttcactga 300  
cacatctccc ataatacaat agttctattc attttcatga atgaggtggg aactacacta 360  
aaaagtagga ttttaatccc tgaggtgcca gttaaaatgg gacnangttg cccttgcaac 420  
acaanatttt aaaaatcagc cttaaataat aagcatggat catgctattt gaatcaaaat 480  
ccctcccata gcatgaaatc ctttaggaaa tggcatttat tgggttaatt caccngctat 540  
tcccaccenc agctataaga tcttcctttg gcnaggaata cccaaccag gaattttct 599

<210> 9163

<211> 480

<212> DNA

<213> Homo sapiens

<400> 9163

aagatggagt ctactctgt caccaggct gaagtgcagt ggcatgatct ctgctcactg 60  
caacctctgc ctctgggtt caagcgattc tcctgcctca gcccccgag tagctgggat 120  
tacaggcacg tgccaccatg cccggctaatt ttttttgtat ttttagtaaa gatgggggtct 180

caccatattg gtcaggctgg tcttgaactc ctgacctcgt gatctgcccc cctcagcctc 240  
 ccaaagtgct gggattatan gcataancn nccatgcctg gcctaaaaaa ctttgttttc 300  
 tngaccatac ttatcatggc tccttgata caaaaaaatc ttgggtcag ttaaactttt 360  
 atggcttttt atgttaccaa gtactgaaac tgggtgaaca cnagccacaa attcctgaat 420  
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<210> 9164

<211> 204

<212> DNA

<213> Homo sapiens

<400> 9164

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 aatggtaact aaacanattt gtgaatatgg gacatctgtg gtcttgaaaa catcagtatg 120  
 atttgtcccc atatttcttc ancctggaca ataaaaacan acaggggagg ggggtaaagt 180  
 gcantaaant acgttgagtg atnt 204

<210> 9165

<211> 376

<212> DNA

<213> Homo sapiens

<400> 9165

cacgttttat agtcctttta tttgaaattc agtgtaaadc actcttaaac tataaattca 60  
 cagttgttgg aggttttttt ttactttaaa tgatgtgaaa gcatttggtc cattcaaagg 120  
 cccctatgcc tttgaatgac atattctcag taacttcttt gccagtaact anagtatgtg 180  
 agactgagta actataatgt gcatatttca anaattagct tcccgtgca ttataacaca 240  
 tttcctagga aagcctttgt atttttcata gccttttcac atatccctca tttanaant 300  
 cacagtgttg cagttttact ttgtttcana ngggaaggcc atcttggttg cataaggggg 360

acanaaaata taatat

376

<210> 9166

<211> 356

<212> DNA

<213> Homo sapiens

<400> 9166

gtanatgatg ggggtcttacc atattgccca tgctgggtgtc aaactcctgg gctcaagcaa 60  
tcctcccacc tcagcgctccc gagtagctgg gaccacaggc acccaccacc atgccacact 120  
aaaatttttt ttttgggggg ganggtaaaa aangggctctt accatgttgc ccaggctggt 180  
gtcaaaactcc tgggctcaag cgatcctccc acctcagcct cccgacatgt aaacggtggc 240  
tacatttccg cacaatcccc gcgggtctccc tcattctgtt ttacaactac tcccacataa 300  
agtaacgtan aanacaanc cccgttattc ccttanaaag tagactggan cttgca 356

<210> 9167

<211> 473

<212> DNA

<213> Homo sapiens

<400> 9167

acattagtat ttacatttat ttaacgtatg cagtttacac actcattatt aaacaaaatt 60  
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tggtataagc atattaatgg acctgggtaa ggaaaagtga tggaagaaga ctgcagccca 180  
tggcattttt ctttttacca aaagaaaacg ctcagtagca ccataatggt aatacttaaa 240  
agaaatacat aagatagaac attttaactg ctatcattga ggtaacctg cttttattta 300  
agtgaattat acaggaaatt aacagtacag gcagtatttt ggccaacttc tgcttatgtc 360  
agctgancat tgtccataaa caaaagcnaa agaaaataat gctaatacata catggaactt 420  
ttgttcttgg gtacaattcn gccccctgcc ttgaattcct nggntggnaa aaa 473

<210> 9168

<211> 452

<212> DNA

<213> Homo sapiens

<400> 9168

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aaatagacag ggtcttgctc tgttgcccag actggagtgc aatgggtggaa tcatagctca   60
ctgcagcctc aaactcctgg gctcaaatga tgcttcacac tctgcctccc aaagtgttgg  120
gattacaggc gtgagccacc acacgtatcc ggatccagtgc cggttttaat gtancataag  180
agttgaacac tgattaaaac ctttttcata ctcataata atcaacagca ttcattagat  240
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tcacattcat cacattttga ctgtcttctc cacaatggac ttcctcatga atagtaagtt  360
caganagttg gctacaactt ctgctgcact gaacacactg gtagggttnc tcctcancat  420
gggttttctg gtgttcaata anacantac at                                     452
    
```

<210> 9169

<211> 439

<212> DNA

<213> Homo sapiens

<400> 9169

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aaaatgggga aggtttatta aggtttttcc tcaagaggaa cagccaatct cttgcttctt   60
gagagaagca attaattgga aatgtntgtc acaccttggg cccagaacca caggaggccg  120
cttctcagca tgcccaacga acatacatca tccccaattc ccatttaaag ctcattaatg  180
tctacaaaac agaatccacg ttgccttccc agaaaacaga actaggaacc cagtcaaagc  240
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caacaaaccc atgatgaaac tgcagtaaaa tccaggatca aagaaatgtc tggactacat  360
tttcaagaat aacttacagt ttttacattt tggggaacat aaatactaaa aactgggttn  420
    
```

ttagaacgcc tcaaancctc

439

<210> 9170

<211> 513

<212> DNA

<213> Homo sapiens

<400> 9170

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acaggggccc gccaccatgc ccgactaatt tttgtatttt tagtaaanac ggggtttcac	180
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ggattacagg catganccac tgcgcccggc cactaatcca tattacaaa ttaaagcctc	300
naaattaacg ttttatctca attatagtca ttctgttgca aggaactttt aanaacaatg	360
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actgataact taaattaagg ctgaaggtna ccgaaaaaat aaaaattaat tccnctcct	480
aaaccggtnt ttaaaattcc naagccacc aaa	513

<210> 9171

<211> 497

<212> DNA

<213> Homo sapiens

<400> 9171

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tataactaatg taataacaga tcttctcatg catttatcgt gtttataaat atagaagaaa	120
gctggcttac agggctgttg ggacaaattt ggaaaagtgt atttggcaat tacacagtaa	180
aagttaacag tgttgactat cagattctct tttctgtcag tttttagaat acatccccta	240
tacatctgtg aataaatggt aatggctct tagagtctct actttttgtg aacatgccag	300

agttaagtaa attgtcaaag gatccaggtt gacaatgtgt tatttgtcaa tttttctaataat 360  
 gaaaaacaga tcttagaaaa atgaactctt ctgcatttca ttggtanagg ctgatataatt 420  
 acaagccgga atcattcaac aataaaaaaa gtcctccatg aaataaaacc cnaaaattat 480  
 ttatcnataa tnacngt 497

<210> 9172

<211> 525

<212> DNA

<213> Homo sapiens

<400> 9172

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 ctacaggcgc cgcaccacaac gcctggctaa ttttttgtnc ttttagtaaa natggggcctt 180  
 caccgtgttg gccaggctgg tctcgaactt ctgacctcag gtgatccacc cgcctcggcc 240  
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 anttgctccc agtgagacat tggctcttta ngggtttttt gtattttaa tgaactgcac 420  
 aaaatgaaac ggggccttgc caaaaaatcc tgggtgcttgc tccattcncc antggggggc 480  
 cgtcnctgct tttgtcttca aaaacctngg acancctatt ccccc 525

<210> 9173

<211> 425

<212> DNA

<213> Homo sapiens

<400> 9173

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 tgcctgcaag tgaaaaaaat gcagcaacga aaaacaggga acacggggca cataataata 120

ttctaanact ttgtgccatt aagttaaaaa tatctgttca taaaaaaatt gggtttccttt 180  
 tccacctccc acccccnat tggaattttc aggcittaaa atttaagtna ttcccctggt 240  
 ctgaggatat gatctcttgc cttttttct tcaactgtta cttgtgaggg tttaatttgg 300  
 aaatgataac ttaatagggt tctctttgga gtgaaatttc ccattgtagg cncataggaaa 360  
 aacaaggcaa aanctgcant tagcgtctca ttttccatt tnaaaactct ctggggccct 420  
 nacct 425

<210> 9174

<211> 533

<212> DNA

<213> Homo sapiens

<400> 9174

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 cttctgcca ctttctggg tgttggggg gcccgctgac aacagtcaca aatccagcga 180  
 cctgatggaa tagcaccaag gccacacaa aaagtatgat aacctctgtc acacatatca 240  
 canaacatca tttcttctc atggtggggt tgtccacata taatgcatgt ttacattcc 300  
 atacactgcc atgggtaggt cttaatcata aaaacaagct ccattgtcat atccaggcaa 360  
 gaaagatggc cactattctc acattgggan cagtgtataa gtgattcacc tttcctttct 420  
 tgttggantc cttaccttca aanaaattcc acatatacat ttggaatgaa ctttggcttg 480  
 ttaccaagaa ntganttga aaattccaaa ctttgggaac actttcttng aat 533

<210> 9175

<211> 456

<212> DNA

<213> Homo sapiens

<400> 9175



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 ttagatatct ccacaaataa aaacganatt cacctacaca aatattcctt ctctttaagt 180  
 tcacaaaatg caagaagaaa agaaaaatga tgtttaggtg tcagtaagga aagcatttct 240  
 agatgagaaa aagaaactta agtggttattt cccccctaca gttttgaana cccggctgaa 300  
 cacagcataa aaattgtcag gaacagtgcg ttctctttac antatgaagt gaactaaggg 360  
 gttgggttgg ttcaattctg gcanccatt ccanaaaaaa aaccctcaa nttgacagt 420  
 cctttgtcc gtttangga tggcaacacc tntcc 456

<210> 9176

<211> 382

<212> DNA

<213> Homo sapiens

<400> 9176

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<212> DNA

<213> Homo sapiens

<400> 9177

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